96-44

COMMUTER AIR SAFETY

(96–44)

HEARINGS

BEFORE THE

SUBCOMMITTEE ON OVERSIGHT AND REVIEW

OF THE

COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION

U.S. HOUSE OF REPRESENTATIVES

NINETY-SIXTH CONGRESS

SECOND SESSION

FEBRUARY 26, 27, 28, 29, 1980

Printed for the use of the
Committee on Public Works and Transportation

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COMMUTER AIR SAFETY

TUESDAY, FEBRUARY 26, 1980

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON OVERSIGHT AND REVIEW,
COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10:12 a.m., in room 2167, Rayburn House Office Building, Hon. Norman Y. Mineta (chairman of the subcommittee) presiding.

Mr. MINETA. The Subcommittee on Oversight and Review of the Public Works and Transportation Committee will please come to order.

Today, we begin public hearings on the safety of the commuter aviation industry. Our initial emphasis will be in the areas of operations, maintenance, and the supervision afforded by the Federal Aviation Administration.

Our interest in commuter air safety is not of recent vintage. Since 1975, when the Public Works and Transportation Committee assumed legislative and oversight responsibility for aviation matters, this subcommittee has made aviation safety, including commuter air safety, one of our most important goals. Passage of the Airline Deregulation Act of 1978, which has expanded the role of commuter aviation in the air transportation system, further intensified our efforts to monitor commuter operations.

This subcommittee and its staff have therefore been actively involved in commuter safety for sometime. With the recent increase in public discussion of commuter safety issues, including the two recent forums conducted by Federal agencies, it is appropriate that we now move into congressional hearings on this issue.

Discussion of commuter safety has often bogged down in statistical comparisons with other segments of the aviation industry. The controversy raised by such comparisons can obscure the real purpose here, which is to give the traveling public the highest degree of safety reasonably achievable, and to give the industry the benefit of the public confidence that comes with that kind of safety.

If we judged by comparisons alone, we would never concern ourselves with aviation safety at all, since flying is so much safer than most other modes of transportation.

We want to know whether commuter aviation has in fact achieved the highest degree of safety reasonably achievable, or whether there are measures which commuter airlines or Federal agencies or others could be taking which would improve safety.

Is the present system as safe as it could be and should be? That is the question we ask of any transportation mode, and that is the question we are here to ask of commuter aviation.

If the testimony supports criticism of the commuter safety record, then we have a duty to the traveling public to seek out those measures and procedures which will achieve the highest safety standards attainable. On the other hand, we also have a duty to restore any confidence which the same traveling public may have unfairly lost as a result of the public debate on this matter.

The subcommittee begins with no prejudice or prejudgment on this issue. We are here to listen and to evaluate. We will first hear from the Chairman of the National Transportation Safety Board, Mr. James King. The Safety Board recently held a 4-day public hearing after many months of inquiry, and although the Board has not adopted a final report setting forth its findings, we have invited Mr. King to express his views on this subject.

After the subcommittee has heard Mr. King and has had the opportunity to question him, then we will call on the NTSB's accident investigation staff for a more detailed look at several commuter accident investigations and what can be learned from them.

Before we go to the first witness, however, I would like to ask Mr. Goldwater for any opening remarks he may have.

Mr. Goldwater?

Mr. GOLDWATER. Thank you very much, Norm.

In preparing for these hearings on commuter airline safety, I have occasion to review the accident statistics. They seem to tell the story of the good news and the bad news, simultaneously, depending on which statistics you read.

The bad news involves the figures for the first 7 months of 1979. During this period, 48 people were killed in 10 commuter accidents. In the same months of 1978, only 22 people were killed in 4 accidents. These figures would suggest that fatalities more than doubled directly after airline deregulation took effect late in 1978. Airline deregulation, of course, was the major cause of the rapid growth of the commuter industry in 1979.

On the other hand, the good news seems to be that for the entire years of 1978 and 1979, the commuter fatal accident rate per 100,000 hours is down to .82 in 1979 from .89 in 1978.

The many statistics which I have seen are certainly confusing and I look to the Chairman of the NTSB to clarify this subject today.

In any case, I think it is correct to say that the doubling of the commuter fatalities in the first 7 months of 1979 caused a great deal of concern to a great many air travelers.

I would like to offer the thought today that perhaps the Congress should share the blame for the increased commuter fatalities. It was the Congress which enacted the Airline Deregulation Act of 1978. Congress set up a new situation where a decrease in safety was probable—certainly not with all operators, but with a few. And what did Congress do to offset such a decrease in safety? Perhaps too little.

One mistake we made was letting the new FAA Administrator tell us he could handle the rapidly expanding commuter surveillance job without needing more people. This, of course, seems ridiculous today, in hindsight.

I noted in the FAA's fiscal year 1981 budget submission they plan to hire 195 new inspectors, mostly for commuter surveillance. To borrow a quotation from Shakespeare, Cleopatra talking to her handmaiden, Langhorne Bond's earlier estimate of not needing more inspectors was made back in his salad days, when he was green in judgment and cold in blood.

In any case, Mr. Chairman, Congress went along with deregulation without more commuter inspectors. We also failed to provide more ADAP money for the growing number of commuter airports, for ILS, VASI, radar, weather reporting facilities, and so on.

So one of my goals in these hearings is to make up my own mind as to how much of the responsibility Congress should bear for the initial decline in commuter safety directly after deregulation. This is especially important since another major piece of aviation legislation is coming up this year, the ADAP bill, and Congress again has the opportunity to affect the safety of all segments of the aviation industry, for better or for worse.

I think we should approach the future with a sound knowledge of the past. I commend the Chairman for setting up these hearings to provide an open-minded forum to examine these and other questions.

In closing, I would like to bring up one more area which I hope to explore this week, namely, how do we stand today in the balance between too much and too little FAA regulation.

On the one hand, I hear of accidents being caused by operating aircraft overweight and outside center of gravity limits; or accidents caused by companies who require pilots to descend well below FAA minimums on approach before abandoning approach. Such incidents would infer too little FAA regulation.

On the other hand, I hear complaints from many well-respected operators who feel that the FAA is causing needless economic disruption through unnecessary regulations. The proposed airport security rules for commuters are often mentioned in this context.

Mr. Chairman, thank you very much for this opportunity, and I look forward with you to exploring this very vital area of aviation transportation.

Mr. MINETA. Thank you, Mr. Goldwater.

And now, we are pleased to have with us today Mr. James B. King, the Chairman of the National Transportation Safety Board, accompanied by Mr. William R. Hendricks, Chief, Aviation Accident Investigation Division, Bureau of Accident Investigation; John Ferguson, senior air safety investigator, Bureau of Technology; and David F. Thomas, air safety investigator, Aviation Accident Investigation Division, Bureau of Accident Investigation.

For those of you who will be testifying this morning, if I could ask you to rise and please be sworn in.

Do you solemnly swear that the testimony you will give before the subcommittee will be the truth, the whole truth, and nothing but the truth, so help you, God?

Mr. KING. I do.

Mr. HENDRICKS. I do.

Mr. FERGUSON. I do.

Mr. THOMAS. I do.

READEX FICHE

Mr. MINETA. Mr. King, please go ahead and proceed in your own fashion.

TESTIMONY OF HON. JAMES B. KING, CHAIRMAN, NATIONAL TRANSPORTATION SAFETY BOARD, ACCOMPANIED BY WILLIAM R. HENDRICKS, CHIEF, AVIATION ACCIDENT INVESTIGATION DIVISION, BUREAU OF ACCIDENT INVESTIGATION; JOHN FERGUSON, SENIOR AIR SAFETY INVESTIGATOR, BUREAU OF TECHNOLOGY; AND DAVID F. THOMAS, AIR SAFETY INVESTIGATOR, AVIATION ACCIDENT INVESTIGATION DIVISION, BUREAU OF ACCIDENT INVESTIGATION

Mr. KING. Mr. Chairman. I am very pleased to be here this morning to present testimony on behalf of the National Transportation Safety Board dealing with the current status of commuter airline safety.

The Board shares the subcommittee's interest in this timely topic, and has recently completed its own en banc hearing on the safety problems in the commuter industry.

There is traditionally one member in attendance at accidents and public hearings. Therefore, an en banc type of hearing is an unusual proceeding for the Safety Board.

The Safety Board's interest in commuter safety has been a long-term one. Since the Board's creation in 1968 we have expressed our interest through safety recommendations, special studies, accident investigation reports, and in 1972, a special investigation and public hearing on air taxi safety.

Eight months ago, the Board's interest in commuter safety was highlighted once again, when I made a statement expressing the Board's growing unease over commuter safety based upon recent NTSB accident statistics showing an increase in commuter accidents—that was last July—coupled with a recurrence of similar themes emerging from our accident investigation data over the last several years.

While the use of statistics can indeed be misleading, it is impossible to ignore the fact that commuter accidents and fatalities have been steadily increasing since 1975. In 1975, for instance, there was a total of 46 commuter accidents with 28 fatalities. In 1979, these figures rose to 58 accidents with 63 fatalities.

In addition to the steady increase in commuter accidents and fatalities over the last several years, commuters do not fare well when contrasted with air carriers on terms which must be regarded the most favorable to the commuter industry—accident rates based upon 100,000 departures.

NTSB statistics for 1979 show the accident rate for commuters per 100,000 departures is nearly 5½ times the rate for certificated route air carriers. And I believe that is reflected in our chart on the bottom, Mr. Chairman, so that it might be graphed and a ready comparison made.

The Safety Board cannot find this—and no one else should find this—an acceptable accident rate.

Beyond statistics, the Board's concern with commuter safety stemmed from its work in accident investigation. Over the last several years, we have investigated commuter accidents from Alaska to the Caribbean, from Maine to California. In the course of

these investigations, the Board has found a disturbing recurrence of similar problems. The Board's investigations have revealed weak operational and maintenance practices, and although infrequently, intentional disregard for Federal regulations and company procedures. Coupled with this situation, we have discovered that FAA surveillance of commuter airlines has been frequently inadequate as a result of the General Aviation District Office (GADO), staffing levels, workloads, and lack of standardization of surveillance procedures.

Finally, there were instances where the lack of FAA management support served to diminish the effectiveness of the surveillance and enforcement activities.

I must emphasize that despite the deficiencies uncovered by our accident investigations, it is clear that the vast majority of commuter airlines are well-managed, safety-conscious companies. That is to say, the entire industry should not be characterized by those few operators which we might term "bad apples."

However, the deficiencies that were uncovered repeatedly raise serious safety questions concerning the adequacy of policies, procedures, and regulation of the commuter airline industry.

Based upon our concerns, the Board convened a 4-day en banc hearing on January 28, 1980, to examine problems in air commuter safety.

In preparation for our hearing, our staff visited 45 commuter air carriers throughout the United States to survey their management of the operational, maintenance, and safety practices and to discuss the industry's safety needs.

In addition, other staff members visited FAA facilities in the Southern and Southwest regions, as well as in Washington, D.C.

We examined the FAA's program for surveillance of part 135 operators, staffing and workload levels at the GADO's and the Air Carrier District Offices, the ACDO's, and the other influences which affect the quality and effectiveness of the FAA relationship with the commuter airline industry.

During the course of the Safety Board's 4-day hearing, more than 40 witnesses were called to testify. The major areas of interest to the Board during this hearing were: (1) Operational control, which includes the operational management of the company, preflight planning, dispatch functions, and weight and balance issues, and the implementation of the approved operational programs by management and pilots; (2) pilot training, workload, flight and duty time and relationship to company management; (3) maintenance issues, especially airworthiness accountability; and (4) FAA surveillance of the commuter industry.

In the area of flight operations, testimony at the hearing underscored the need for positive operational control. The Board was told commuter flight operations requires trained flight controllers or dispatchers whose only responsibility is the preparation of a flight.

Witnesses questioned whether commuter carriers demonstrated positive control of flight operations and cited the absence of clear lines of authority from the director of operations to the flight controller and the pilot in command.

Other areas of serious concern raised were the adequacy of weight and balance procedures and pilot and copilot qualifications.

In the latter instance, much of the testimony supported establis
ing new minimum flight hour requirements for commuter pilo
and copilots.

In the area of pilot training, witnesses stressed the overwhelmi
need for an improved pilot training program. Most testimony poi
ed to the fact that the pilot training program must be a viab
factor in the company operations, and not just a paper progra
that is modified for each pilot.

Witnesses stated that more emphasis should be placed on eme
gency training and flight training at gross weights. Finally, tes
mony at the hearing underlined the need for better ground trai
ing on preflight planning and dispatch functions, especially in t
area of weight and balance procedures.

The maintenance witnesses brought up two distinct proble
areas. The most serious maintenance safety issue involved t
adequacy of maintenance management in the commuter industr
Clearly defined maintenance programs and improved compa
manuals and procedures were called for by several participan

The second problem raised was the lack of qualified mechan
for the commuter industry and the need for improved traini
programs, particularly for the new airframe and powerpla
mechanics.

Finally, we received extensive testimony on the quality and eff
tiveness of the FAA surveillance. The witnesses who addressed th
subject were almost unanimous in stating the need for better co
munication between FAA and the industry, and within the FA
itself.

Witnesses stated that poor communication has often resulted
a lack of standardization of FAA-required programs, and indust
confusion over the interpretation of regulatory reforms. Some w
nesses expressed a need for an attitude from FAA which w
assistance rather than enforcement-oriented.

Several witnesses called for increased manpower levels for co
muter surveillance. Finally, there was a need expressed for FA
surveillance to be conducted during the night shifts when t
majority of commuter maintenance is accomplished.

The Board has just completed the first phase of its investigati
of commuter airline safety—the en banc hearing process. In t
weeks ahead, the NTSB staff will be analyzing the data we ha
gathered and preparing a final report along with any safety reco
mendations deemed necessary.

While it is premature for me to make any conclusive remarks
the Board's findings at this time, I would like to make one indiv
ual observation.

One of the themes woven into the fabric of our entire heari
structure was the relationship between economics and safety. Fr
the testimony I heard, it was evident that the quality of mana
ment of an individual company frequently was the deciding fac
in how safely any commuter airline or program operated.

The testimony indicated that while in some cases a poor fin
cial posture could be a warning of an unsafe company, it certai
was not an absolute guide. In fact, most witnesses stated that
company management was going to violate procedures and regu
tions, the financial stability of the company had little effect on t

decision. If there was an inclination to cut corners in a manner which might affect safety, that so-called bad apple operator would cut corners irrespective of whether they were making large-scale profits or just getting by.

Mr. Chairman, this concludes my prepared remarks. Should you or any of the members of the subcommittee have any questions, we will be glad to try and answer them.

Mr. MINETA. Thank you very much, Mr. King.

In your statement, you make reference to a 1972 special investigation and public hearing on air taxi safety. While I realize that you were not at the Board at the time, I wonder if you could relate any conclusions and recommendations from that study to the more recent accident investigations conducted by the Board staff. As you have indicated, there are some recurring causes that, had proper action been taken by the FAA, either in the manner of educating these operators on specific problems, or more stringent enforcement and supervision, these later accidents could have been prevented.

Mr. KING. I would like in this case, Mr. Chairman, if Mr. Thomas, who was involved with our recent hearing had been working with the 1972 report, if he might respond directly to you, Mr. Chairman.

Mr. MINETA. Mr. Thomas?

Mr. THOMAS. Yes, sir, many of the recommendations and the conclusions that originally came from the 1972 special study have carried through in the intervening years since 1972. We have found recurring patterns of causes and factors relating to commuter accidents which, as I said, were identified in 1972.

Many of the recommendations which stem from the 1972 special study certainly remain valid. I think the most noticeable one was the initial recommendation by the Safety Board to upgrade and to rewrite part 135, which applies to commuter airlines, and in doing so, to separate the commuter from the individual air tax operator. Within the general framework of that recommendation fell many other safety areas and safety issues which have been applicable to the commuter accidents since.

Some of these concerns of 1972 which remain valid and which were subject of recurring recommendations were an upgrade of the quality management of part 135 operators; upgrade of pilot in command requirements; certainly, there was heavy emphasis in 1972 on commuter surveillance by the FAA—this goes to the training of the FAA inspectors and to the workload of the FAA inspectors who perform commuter-type surveillance. The point is here that the Board said in 1972 that the FAA inspectors should be primarily concerned with the workload with the commuter and have secondary duties in other general aviation activities. This recommendation was reiterated in the years since 1972.

Other areas were weight and balance procedures, training, especially training of the maintenance personnel, and finally, manual requirements. These are manual requirements for the companies and manual requirements from the manufacturers as they apply.

So the areas that were generated in 1972 remain current through the mid-seventies, and the Board has made recommendations and followup recommendations in these areas.

Mr. MINETA. Following those recommendations to the FAA, what would you say their actions were relative to those recommendations?

Mr. THOMAS. Well, the Board, of course, carefully evaluates all of the recommendations as they are responded to by the FAA. In 1972, when the recommendation was made to rewrite part 135, many of the areas that we continually press for fell within this rewrite.

Now, it took 7 years to get the full rewrite of part 135 into action. So whenever the Board would come back with a reiterated recommendation on various parts of 135, while there would be some interim progress, ultimately, it would go back to when the new part 135 is issued, all these problems would be taken care of. So the FAA would make movement on it, they would take steps, but the final action on each recommendation would ultimately be couched in terms of the new part 135, which came into effect and was implemented last year.

Mr. MINETA. Were there any of those recommendations which were not acted upon as part of the rewrite of 135?

Mr. THOMAS. We made 55 safety recommendations on part 135 operations since 1972, and many of these were directed at equipment changes or FAA policy matters. However, 11 percent of the 55 recommendations are classified as open unacceptable action after the revision of the new part 135, and other FAA responses regarding the recommendations.

Mr. KING. Mr. Chairman, I think it might just be useful to add what we said when we said the year 1972. This was May 1, 1972, of the recommendations.

Mr. MINETA. That is fine. And, given what you found in terms of the recurring kinds of things, what would you say those recurring specifics might have been in the statement with regard to your recent investigation?

Mr. KING. Management, FAA surveillance, weight and balance issues, and training.

Mr. MINETA. Were those the principle, recurring problems?

Mr. KING. And then we have maintenance problems. And really when we say that, we should include FAA surveillance and link it with both.

Mr. MINETA. And given those four recurring specifics that you referred to, could you tell us what action you took when you discovered, again, these still existing, considering your 1972 and your 1979 investigations?

Mr. THOMAS. Yes, sir, some of the primary areas were with the responsibility for who does what in an airline—in this case, a commuter airline. The heart of this, of course, is the management aspect.

Initially, the Safety Board did make recommendations on this and there have been several recommendations, sir, between 19 and 1979, which have gone to upgrading individual responsibilities within a company.

Mr. MINETA. Now, is that discussion, Mr. Thomas, directly with the company as you do your investigation? Do you then make your recommendations to the company specifically?

Mr. THOMAS. The recommendations are made to the FAA, yes sir, and it would go to their requirement to insure that there are adequate guidelines and adequate personnel to implement the management and regulatory guidelines within the company.

So certainly, in the area of management and the delineation of management responsibilities, this has been an area in which the Board has continually made recommendations.

Mr. MINETA. To the FAA.

Mr. THOMAS. To the FAA, yes, sir.

Mr. MINETA. And what has been their response?

Mr. THOMAS. The response, almost universally, is that the—from Washington—is that the regions have been counseled, have been instructed, to review manuals, to review the areas of responsibilities, and then, getting back to my original response, the new rewrite of part 135 will contain more definitive management requirements.

So the interim response is we have alerted the regions to make sure the operations are being overseen by adequate management and that when the new part 135 is rewritten, it will be more specific.

Mr. MINETA. In Mr. King's statement, where he makes reference to inadequate FAA surveillance practices, is that common to any region, or do they exist pretty much throughout the FAA regional organizations?

Mr. KING. Mr. Chairman, our experience has been from Alaska to the Caribbean and from New England out to California, and includes waystops, from our perspective, in-between, and we have not seen any appreciable difference.

Mr. MINETA. And does the Board have occasion to check back and see what has happened in those instances where they have found the inadequacies?

Mr. KING. Not as a general rule, Mr. Chairman, because our mission is to go out, do the accident investigation, and send the recommendations, and then follow the recommendations. We are not staffed to go back and to check and to see if everyone of our recommendations are being heeded.

Mr. MINETA. And in going over your statement about the statistics, relative to the 58 commuter accidents and the 63 fatalities in 1979, as compared to 46 accidents and 28 fatalities in 1975, as I recall, you were recently quoted as noting that a majority of the accidents and fatalities took place in the first 6 months of 1979, and there was a substantial decrease in the latter part of the year.

Could you tell us whether or not something was taking place which had an effect upon the commuter operations?

Mr. KING. Well, 6 months ago there were two figures that concerned me, Mr. Chairman. I saw the number of fatal accidents, which in July were 10, and the number of fatalities was in the upper 40's, 47, 48, and I noted the year before in the same time period, there had been 5 fatal accidents with 23 fatalities.

On the other hand, I also noted that both years, there had been 26 accidents. So if you will, they were somewhere running about the same. It was just that we saw more fatalities, and more fatal accidents.

But if I could, let me move the chart for a moment, Mr. Chairman. The profile here indicates what we are talking about. In an effort to be fair to the commuter industry we also looked at fatalities based on 100,000 departures and compared these figures for commuter air carrier with the certificated route carriers.

We were also concerned because time was that we were still seeing the same types of accidents, but there were more people onboard the aircraft. So that if you did have a fatal accident, there was greater exposure to risk.

We also mentioned recurring themes such as weight and balance issues. We started to run into greater weights and further out of balance, where forgiveness factors became critical.

As you move closer to your gross weight, the performance of the types of aircraft we saw changed considerably. If you were to lose an engine, there were certain kinds of critical maneuvers one had to make almost instantly. You did not have a forgiveness factor built in which makes training a key factor. So the training, then, becomes involved.

These themes, such as weight and balance, combined with statistics, made us want to get the attention of all the parties, and say, "This is becoming a very critical issue. What do you intend to do?"

And initially, the response' I daresay, was modest. A greater public attention was drawn to the issue of commuter safety, there seemed to be a very vigorous effort by all parties to address existing problems—at least the fatal accident rate and the number of fatal accidents went down. There continue to be accidents, but the fatalities and the fatal accidents went down. Now, maybe that early part was abnormal, Mr. Chairman. We do not know yet. We have not finished all of our accident reports for the last year yet.

Mr. MINETA. Is that also because under deregulation you had larger planes being operated by the commuter aviation industry?

Mr. KING. Well, I think one of the largest as far as fatals that year was the accident in May, in Maine. We had 17 fatalities, and that was a Twin Otter, and that aircraft had been around and in service for some time. I am trying to think of the major fatalities. I think that was the single largest fatal commuter accident, in 1979.

By the way, my concern was just as you mentioned, that there would be newer aircraft coming online that had a capacity to carry more people, and if we are seeing the kind of profile on fatal accidents and fatalities, then we are going to be exposing a lot more people to an opportunity for an accident.

Mr. MINETA. Thank you.

Mr. Goldwater?

Mr. GOLDWATER. Mr. Chairman, I would yield to Mr. Clinger.

Mr. MINETA. Mr. Clinger?

Mr. CLINGER. Thank you, Mr. Chairman.

In your studies, is there found a consistent correlation between the accident rates of the certificated carriers and the commuter carriers? In other words, has there always been approximately the same differential?

Mr. KING. Well, it has varied somewhat, as you can see. Again, using the departures, as you can see, there have been some differences.

The thing that concerned us was that so many of the accidents that we have investigated in the commuter industry showed problems that were easily identifiable—there was an easy fix; it was not some sort of a subtle thing that overtook you. An awful lot of what we saw were gross errors, and you do not usually see that on the air carrier operations or air carrier accidents. You do see it occasionally, but you do not see it as a recurring theme.

Mr. CLINGER. But you did not find that there was any direct correlation between the financial stability of the companies and the accidents?

Mr. KING. Well, we do not look at that. We asked that question of CAB in our hearings—because we do not do any kind of economic analysis. We originally came under the CAB back in the old days, and we are removed for that reason, so we would not be part of economic considerations. We were just to speak to safety. We did ask whether there was a relationship that the CAB could see and generally, they said no. It was a management attitude, that there were lines that went right into bankruptcy, pulling even above what is required. It was interesting, almost all of the operators we talked to—and we talked to a number of excellent ones, by the way—viewed the FAA standards as minimum standards, and in substantial part, went far beyond them as far as their own operations went. They felt, generally, an obligation to run a good, safe service, beyond the FAA regulations.

The FAA regulations were viewed by a substantial number of operators, as a floor, and not a ceiling.

Mr. CLINGER. When do most of the accidents occur within the flight cycle?

Mr. KING. About 78 percent either in the immediate proximity of the airport, on the airport or on takeoff or on landing.

Mr. CLINGER. I am trying to get the correlation here between commuters and the larger carriers there are obviously many more takeoffs and landings within the commuter industry.

Mr. KING. That is why we use these figures. We feel that it is much fairer all the way around—there are arguments on the other side, but I will not even get into them, I think that is academic—we felt that this is one that is considerably the most conservative and the most favorable to the commuter industry.

So you are really looking at the best possible depiction you could get.

Mr. CLINGER. Do you find that there is any connection between, say, the quality of the airports that the commuters fly in and out of, as compared with those that the certificated carriers fly in and out of?

Mr. KING. With regard to the airports served by commuter airlines, a total of 362 are served exclusively by commuters. Of this 362, only 121 airports, or 33 percent have precision instrument approach facilities while 185 airports have nonprecision approaches. The remainder—56 airports—have no published instrument approaches.

When you consider all the airports which are served by commuters and trunk carriers, there are 604 airports, of which 340 have precision approaches and 208 airports have nonprecision approaches.

Mr. CLINGER. You mentioned in your statement that during your hearings into commuter safety, the Board was told that commuters required trained dispatchers or flight controllers. Do your findings confirm this requirement, that there would be a requirement for such trained——

Mr. KING. Mr. Thomas, if you would respond to that, please.

Mr. THOMAS. Yes, sir. I would like to make one differentiation. The term, "certificated dispatcher," of course, is required under part 121; the airlines are required to have a licensed dispatcher.

The testimony at the hearing did not go to the point where they said there should be a licensed dispatcher. There is an economic evaluation to be made here.

However, the hearing and our investigations over the past years have certainly indicated that positive flight control, a good flight operations department, cannot be run unless there are trained people who are responsible for the dispatch and the handling of a flight. This is flight following, making up of weight and balance—this does not go to a certificated dispatcher, but we feel like there should be a requirement—and in most cases, there are—to have trained people to put together the documentation on a flight, and to make sure that when a flight does get off, that if there is a weight balance error, that they at least have enough background to determine where the weight balance error is and know the procedures to properly load an airplane.

Mr. KING. By the way, just as an add-on, if I could, on this, let me take Prinair, which as you know, is the world's largest commuter, operating out of San Juan. Their pilots, for example, before they can sit in the left seat, have 4,000 hours in type.

The aircraft that they fly certainly is a reasonable aircraft, the Heron. So that here are two elements. When we checked, at least on the one accident that we went to, the maintenance there did not seem to be a problem. What did we have? We had an extraordinary weakness in the ground crew.

So we are talking about a system that requires several different parts to be coordinated and to have a level of training and a level of knowledge to provide a safe product. Any one of those areas that fails can fail the entire system, and that is why there are times when it may seem as if we talk as if there are episodic events that are occurring in some of these accidents. But there is an interrelationship. There are links in a chain that run throughout the industry, and that is why we raise them sometimes as individual issues, to isolate them and understand that they are part of that system. And a failure in even something such as handling your baggage on the loading on one of these aircraft can be critical.

Mr. CLINGER. Just one final question. I gather that since deregulation, we have more airports now being used than were before deregulation; is that true?

Mr. KING. The answer to that is "Yes."

Mr. CLINGER. So that——

Mr. KING. There are more that are being exclusively served by commuters, as opposed to the mix. The carriers are pulling back.

Mr. CLINGER. So there are a lot which are, in other words, being flown into for the first time, or at least——

Mr. KING. Or, they are your only option. If not the first time, they may have been operating out of that particular community for some years, flying parallel service. Now Delta has pulled out, and you are the exclusive service, if you are the commuter, so that if you are going to fly, you are going to fly with them.

Mr. CLINGER. But wouldn't there also be cases where the commuter for the first time is flying in, where they have expanded their routes into a new airport?

Mr. KING. Yes. That was one of the concerns that we wanted to raise with the CAB. Before you permit someone to come in—if there were economic benefits, as there seem to be, are you going to permit the bad apples to expand into a community that had been receiving another level of service. That is what our real concern was.

Mr. CLINGER. That is what I was wondering, if there was any connection between the fact of the expanded service and the new routes being opened up and so forth, and the accidents.

Mr. KING. That was our question, and we raised it with CAB. They said that they look to FAA for all of their information to make such a decision. So we came back to FAA.

Mr. CLINGER. And FAA said what?

Mr. KING. FAA, when requested, the forms that we saw, looked—I think—perfunctory might be the most courteous.

Mr. CLINGER. So we really do not know at this point what——

Mr. KING. We expect to see a system where there is no denigration of safety.

We felt that if the community was going to be facing a decision as to a commuter carrier versus a larger carrier they were entitled to a better presentation of the facts on the question of safety than a very perfunctory sort of thing to meet minimum standards.

Mr. CLINGER. I would agree.

Thank you, Mr. Chairman.

Mr. MINETA. Thank you, Mr. Clinger.

Mr. Levitas?

Mr. LEVITAS. Thank you, Mr. Chairman.

Mr. King, I followed your hearings in January and have read your testimony, and I commend the NTSB for focusing on this very important problem, because if deregulation is to work, and the public safety is to be protected, clearly, this is a major area, because deregulation does not work without commuter transportation taking the place of the trunk carrier and local service carriers, and the public has a right to expect the same level of safety, regardless of who is providing that transportation, it seems to me.

In your testimony, you list four areas of primary inquiry.

Now, it is my understanding that the most critical point in flight operations is the takeoff and landing, the transition; is that correct?

Mr. KING. That is correct.

Mr. LEVITAS. It is also my understanding that more than two-thirds of the airports being served by our commuter aircraft do not have positive landing control navigational systems, such as ILS or related systems; is that correct?

Mr. KING. Of the 604 airports served exclusively or jointly by commuters and trunk air carriers, about 56 percent have precision

approach facilities, another 34 percent have nonprecision approaches and about 10 percent have no published approach. However, for the 362 airports served exclusively by commuters, only 33 percent have precision approaches and 51 percent nonprecision approaches.

Mr. LEVITAS. I think I would like to have the total number of airports which are now being served by commuter carriers, and which of those do not have landing control systems, by number, and then I am sure we could figure out the percentage. The figure that I have is 68 percent, approximately. Does that sound about right?

Mr. KING. That does not sound unreasonable, and if you have a line of questioning, I could surely try to respond.

Mr. LEVITAS. Well, my point, obviously, is that since that is the most critical point in flight operation, doesn't it seem that there should have been some more emphasis placed upon that in the Board's hearings on commuter transportation?

Mr. KING. As background to the Board's hearings we did look at the safety problem of commuter airports. We discovered that of 362 total airports, 23 percent serving commuters exclusively had a control tower; 12 percent, terminal radar; 33 percent, precision approach.

And compared to, say, the air carrier, we are talking about 90 percent with precision approach.

Mr. LEVITAS. Did you have occasion, in examining the commuter accidents which occur at airports which do not have precision landing equipment, to compare those accidents with accidents which occur at airports which do have such equipment? Do we have any breakdown between the number of accidents that occurred at the former, compared to the latter?

Mr. KING. I can get that for the record, sir.

Mr. LEVITAS. All right, because that may help either prove or disprove the assumption which I make, that we ought to make a major effort to require and provide the ADAP funding for precision landing equipment at these commuter airports.

[The following was received for the record:]

NTSB SUBMISSION

Between 1975 and 1978 there were 181 commuter airline accidents. Of this number, 10, or 5.5 percent, occurred under IFR conditions during the final approach phase of flight. This is the point when the lateral and vertical guidance from the ILS is most helpful. However, we do not have a breakdown of those 10 accidents to specifically state how many involved precision versus non-precision facilities.

Actually the subject is fairly complicated because you would also have to evaluate the value of VASI and approach lights along with the type of approach guidance the pilot was receiving. However, to answer the original question, there were fewer than 10 accidents where the type of approach facility was a factor.

Mr. KING. By the way, there is one added item. I am back to that temptation on a nonprecision approach; both are safe, but there is that incredible temptation where you create a problem of breaking the minimum to get in. You know, can I duck under just a bit? It is done, and the ones we hear about are the ones that were unsuccessful. Yet, if you go into the industry, you hear people talking about it all the time. We would like to take that away as part of flying.

At least on a precision approach, everyone understands that it is a lot closer tolerance, and you are really not playing any kind of game in this.

Mr. Ferguson, did you want to add something?

Mr. FERGUSON. Yes. I would like to talk about the philosophy of flying a nonprecision approach versus flying a precision approach.

There are two areas where, on an ILS approach, when the pilot reaches MDA—that is, the minimum descent altitude, or in this case, a decision height—and the copilot calls out some outside cues, the pilot still has to raise his head and fly visually in conditions less than are required for visual flight. He hopes during the transition period that the runway lights will come into sight. We have recommended that in conjunction with the ILS, they have VASI's.

Mr. LEVITAS. I was going to ask you about that. Would that change the situation, as they break out into that decision point, to have a VASI system?

Mr. FERGUSON. Yes. The pilot needs all the breaks he can get under these circumstances. When a pilot lands in clear weather, he sets up his landing slot by determining the trapezoidal shape of the runway he is heading for. If it is a long, narrow trapezoid, he realizes he is too high; if it is a short, squat trapezoid, he realizes he is too low. When it is just right—and you learn this by experience—just the right trapezoidal shape, if you can keep that trapezoidal shape, you can come in. In addition to the trapezoidal shape, the pilot uses the end of the runway, an aiming point on the runway, the natural horizon and his peripheral vision—all of which is needed to make a safe landing on a runway.

When a man breaks out of DH, he is usually about 200 feet in the air. He does not usually see the end of the runway. Obviously, he does not see his aiming point, and he does not have a horizon. He also has very little peripheral vision.

So he is just continuing the programed descent of that massive machinery he is flying—well, I am an air carrier pilot, so maybe I could get in the smaller aircraft, the same thing—but he keeps that programed descent as well as he can until he sees the cues, the end of the runway, and then maybe his landing point, and then a little, stubby trapezoidal shape. And then, if they have got a VASI, now the VASI either tells him he is low or he is high or he is right on it.

Now, when you get a nonprecision approach, this man might fly at an altitude of 400 feet with very little horizon, very little peripheral vision, and he has got to maintain that sometimes for 3 miles, until he starts seeing some clues associated with the runway.

So there is that problem of the transition period, whether you are flying an ILS or a nonprecision approach.

Mr. LEVITAS. Well, then, let me get back, I guess, to the thrust of my question. In the case of improving the safety of commuter carriers, is it your feeling that we could do a great deal in this area by providing precision landing systems at commuter airports which are today 67 percent unequipped?

Mr. KING. I think I would say that, too, is the system as we have suggested. We are talking about runway lights, we are talking about approach lights, we are talking about a VASI, and we are talking about the ILS. And the answer, sir, would be "Yes."

Mr. LEVITAS. Now, what about the avionics required in commuter airplanes? Are they different from those required in certificated carriers?

Mr. KING. Mr. Ferguson?

Mr. FERGUSON. No; the same basic instruments are required for both aircraft. The bigger, more sophisticated air carriers, of course, have more sophisticated equipment, but they are still basically the same.

Mr. KING. There are two things, though, I would like to mention that are among the missing, that make our work very difficult. One is the CVR and the FDR. Many times we do not know the performance capability or what the performance inputs were and how the plane reacted or the pilot reacted, which would be extremely helpful in then determining safer flying techniques, et cetera. And a cockpit voice recorder, of course, is an invaluable aid. So those two are not onboard. And the state of the art right now is for very lightweight, relatively inexpensive equipment of this type. It is available now, and we would like to see something like that included in any package.

Mr. LEVITAS. What about age and health and medical examinations? Are they the same for commuter pilots as they are for certificated aircraft pilots?

Mr. KING. Mr. Ferguson?

Mr. FERGUSON. The health requirements are the same. The 135 operator does not have to retire at age 60. The 121 pilot or captain does have to retire at age 60.

Mr. LEVITAS. What about duty time and off time; are they the same?

Mr. FERGUSON. No, they are not. The 121 is more stringent than the 135.

Mr. KING. There is a gross difference.

Mr. LEVITAS. Overall difference.

Mr. KING. I believe, as long as you have your 10 hours off, you can be on duty, duty time of 14 hours a day, 7 days a week, 365 days a year, in a 135 operation.

Mr. LEVITAS. In your testimony, you point out, as did Chairman Mineta and Mr. Goldwater, the problems of appropriate and adequate surveillance and monitoring of safety requirements by FAA in the commuter industry.

Do you believe that there are any ways in which the commuters, who are really moving into a new era, could be educated, if you will—inspired, informed—as well as subjected to surveillance, in order to get them to recognize their new and enlarged responsibilities—through such means as seminars or regional programs—because you know, you are not talking about Eastern and TWA and Delta. You are talking about people who may never leave southern California their whole life. They are out there, and they do not come to Washington for meetings, and they have probably never seen the regional office of the FAA.

What can be done to get the message out to those people across the country?

Mr. KING. Well, I think that the FAA had their first gathering—they labeled it their first, which indicates, at least to us, that there will be a second, a third, a fourth—I gather it was successful

enough since they are talking about doing it regionally. We hope they will.

I think the thing that at least struck me at our own hearings was that a number of commuter operators look forward to the expansion. They are people who have been in the business and have a pretty good idea of what they are about. They stay in touch with each other, and there is a pretty fair amount of communication.

What we are really talking about is approximately 150 commuters carry virtually all of the passengers. When we start to focus on numbers for management or surveillance or ongoing contact, when you know that you can reach 99 percent of the commuter operators, with about 150 operators, that is not an unworkable number.

Part of the success of such an endeavor though, is an attitude of whether—for example, the FAA is interested in stressing detail, that you cross every "t" and dot every "i" that was the phraseology that we heard from a number of operators, which led us to believe that the maintenance is, quite frankly, an awful lot of paper auditing, rather than onscene "look-see," as to what is really happening.

I am suggesting that it could be symptomatic, because we run into instances where the papers seem to be in order, and yet, when we check on the actual operation, to say the least, a great deal is left to be desired.

Mr. MINETA. Would the gentleman yield?

Mr. LEVITAS. Yes.

Mr. MINETA. I would like to back up on a point you just brought up, about the pilots and the number of hours they are flying. As I understand it, on a single-pilot plane, they are able to operate up to 8 hours a day, and on a two-pilot plane, up to 10 hours a day.

Mr. KING. Did I say 14? Duty time, yes, 14 duty.

Mr. MINETA. First of all, do you know whether or not, in your examination, that we have had any instances where the maximum has been met, either in the case of the 8-hour day or the 10-hour duty day? What is the average, and do we have any indication that this is a safety problem which is causing accidents?

Mr. KING. Mr. Thomas?

Mr. THOMAS. To go to your first question, sir, as far as exceeding the flight time during a day, I do not believe we have had—we have had one or two accidents, but that has not been a problem. The problem has been in the duty day.

We have had accidents where the crews have been up to the 14-hour duty day, and of course, this goes to how well—and it is a subjective thing—how well does an individual function after being on duty and working for 14 hours, and then if you look back and say the man has made 5, 8, or 10 landings, or he has flown 7 or 8 hours.

So the question here is will a 14-hour duty day afford the highest level of safety to the traveling public.

Mr. KING. Air New England is the most recent accident where we had a person who was on about the 14th hour of duty. They were within their parameter of flight time. They were making their 15th approach, I believe, their 9th on instruments; had not had an opportunity to eat, other than a Danish and a cup of coffee,

all day, because of the turnaround ground time. The combination of factors brought the aircraft in, we believe.

This was an entire human factors accident that was triggered by this. You do run into a point where physical exhaustion takes its toll. I think anyone who has flown in instrument conditions, for the kinds of hours we are talking about in that kind of a duty day, recognizes it is an enormous strain, both mentally and physically.

Mr. THOMAS. Mr. Chairman, on the second part of that question, about what is the average, I do not know if there is a compiled average, but based on our survey of 45 operators all over the United States, the average flight time probably ran 5 to 7 hours a day; the average duty time for these 45 carriers ran about 8 to 10 hours.

So to answer your question, I do not believe that there is a high incidence of commuter operators running their pilots right up to the maximum. Certainly, the operators who testified at our hearings said that they have very reasonable flight duty time requirements, in many cases, those which parallel part 121.

Mr. GOLDWATER. Would the gentleman yield for just a followup?

Mr. LEVITAS. Yes, I would be happy to yield.

Mr. GOLDWATER. Mr. Thomas, you said you do not think that flight duty times are often exceeded." Doesn't the NTSB know? Isn't that a very important question to know something about?

Mr. THOMAS. Yes, sir, it is a very important thing for us to know if an operator is violating flight duty time, or any other regulation. But in this case——

Mr. GOLDWATER. Not whether they are violating it, but know what is the average and what is the practice.

Mr. KING. No. We do accident investigation. Actually, CAB and FAA deal with commuters on a daily basis as to flight and duty time, we do not. We are not a regulatory body. We are an investigative agency.

Mr. GOLDWATER. But aren't you empowered to make determinations as to what is causing accidents, what is contributing to accidents generally in the aviation industry?

Mr. KING. What we do is a specific accident and then extrapolate from it. We do not have the entire arena of material.

Mr. LEVITAS. It is my understanding that the NTSB not only has the authority, but has exercised the authority, to make specific recommendations to FAA for regulatory action quite apart from an accident investigation.

Mr. KING. Yes. But the question being asked me, do we have the statistical data to respond to the question, the answer is "No, we do not."

Mr. GOLDWATER. But the question is should you not have it?

Mr. KING. We presently are not staffed, nor do we have the ability to gather that material on a routine basis.

Mr. GOLDWATER. But I mean, you have the authority to do that kind of analysis, do you not?

Mr. KING. Yes, but we do not have the staff to collect the basic data.

Mr. GOLDWATER. But you just made the statement you were not authorized to ramble around the aviation industry.

Mr. KING. We do not——

Mr. GOLDWATER. Only to look at specific accidents.

Mr. KING. We do not have the resources to do that. Gathering that material is not our charge. That is what the FAA does.

Mr. GOLDWATER. You are not required to look at what is contributing to accidents in the aviation industry?

Mr. KING. We deal with specific accidents, and where we start to see universals emerge, then we try and deal with the universal. We deal with the themes that we find. We do not have the entire industry statistics to be able to be totally responsive to the question you have asked.

Mr. GOLDWATER. If the gentleman would further yield, in your accident report on Air New England, you cite the 14-hour duty day, including 9 hours and 16 minutes flight time.

Mr. KING. Yes.

Mr. GOLDWATER. That is a specific accident.

Mr. KING. Yes, that is a specific accident.

Mr. GOLDWATER. Wouldn't that make you inclined to perhaps analyze industry patterns, industry kinds of duty standards.

Mr. KING. But what I am coming to is we do not have the data to do that.

Mr. GOLDWATER. I know, but you have to go out and get it.

Mr. KING. What we do individual accidents. We can explore this question as part of an en banc hearing. We go to certain operators, such as the ones that we took testimony from—which, by the way, represented, larger, and also smaller carriers, but across the board, set a standard of excellence. The duty times were not a problem with them.

Mr. LEVITAS. Just to conclude that line of questioning—and I only have two more—I think what the chairman was getting at, and also Congressman Goldwater, is that perhaps there is some need for NTSB to take a look at the question of duty time and make recommendations to——

Mr. KING. Oh, we have made recommendations. Our first one was made back on May 1, 1972, when FAA said they would develop limitations for that into their regulations. We had an opportunity to ask Mr. Foster, who appeared at our hearing on behalf of Mr. Bond to speak to the policy issues, the status of our recommendations. He said he would have regulations on this issue prepared by the end of March, this year. So I gather they have worked with it very, very carefully, because they have been working on it now, it will be 8 years on this May 1.

Mr. LEVITAS. My next question is this. Do you believe that tough enforcement and tough action by FAA against commuter carriers which are violating regulations by way of suspensions, fines, and revocations of certificates or what-have-you, is adequate, and if it were done, would it be an effective means of getting the others in the industry to realize that FAA is serious?

I am told by the people I spoke to at FAA that they intend to step up their enforcement actions in this regard. Do you feel it is adequate, and do you feel it would be successful?

Mr. KING. Well, we are always delighted to hear announcements of virtue. What we would like to see is the performance side.

It looks, over the past few months, as if there has been an increase in this area. On the other hand, we fall back on situations

we have seen—probably, Antilles Airboats would be the outstanding example, where I believe there was $100,000 worth of outstanding fines pending, and I think they settled finally on $10,000. Now, maybe there was reason to negotiate that or whatever; I do not know. I cannot speak to the rationale in the decisionmaking.

But that particular airline and the way it was managed and the way it was handled, was known to the FAA surveillance, the local for many years. Yet it seems that as the information moved up in the system in the FAA, it seemed to somehow not have the same impact that it did on the people at the local. You can have careful surveillance and careful work being done by the people in the field, and if it is somehow siphoned off further on up in the system, then it becomes ineffective. On the other hand, you can have it ineffective right onsite, by having people overscheduled. One of the ones that was cited that comes to mind is AAI, out of Alaska, where as recently as December, the person who told us over 2 years ago that he could not really do proper surveillance, on an area where we had a serious accident, and and he still has basically the same workload as of January 1 of this year. So it did not change.

Mr. LEVITAS. My last question is this, Mr. King. It is my sense that the commuter industry is much more diverse than, say, the certificated carriers. We can speak about certificated carriers almost as a group, and I am sure they would tell you they are the best there is, but essentially, they are pretty much the same when it comes to what the requirements are, who is working for them, what their skills are, what their procedures and manuals are.

But in the case of the commuter industry, I do not get the same sense that I am speaking, really, of the same type of people. You used the term in your testimony, "bad apples," for example. And the utilization of that term, "bad apples," might suggest to someone that such operators might only exist through a lax attitude towards surveillance enforcement by FAA.

Now, have you found that these bad apples exist more where FAA's management support is weak, and if so, are there some regions in the country where operators have been able to operate which are in the bad apple category—for example, what they call cockroach corner in Miami International, in the Caribbean?

Mr. KING. First, we have seen them everywhere. I could rattle through a bunch—the AAI in Alaska, Antilles Airboats, Prinair, Universal Airways—the accident in Gulfport—Downeast, of course, in New England, as we mentioned. It is pretty much the same When the people come in and testify under oath, the principal inspectors or whoever is responsible, often say, "Look, here is my workload, here is what I have got to do. I cannot do the good job that I would like to do."

That is what we are faced with. So that is why I mention the announcement of being able to do something, we are delighted to hear, and we are heartened. But the ability to deliver it in the field is another thing. Possibly, the people who understand that management aspect could respond directly to it; what will be different?

And by the way, another critical question is the tradeoff. You know, if you are using the same people, and all you are doing is shifting them, then you are shifting them from something else what is that something else that they will be shifted from?

Mr. LEVITAS. Thank you, Mr. Chairman.

Mr. MINETA. Mr. Goldwater?

Mr. GOLDWATER. Mr. King, backing up to our previous discussion, it is not quite clear in my mind what authority you have and do not have.

I understand you have authority to investigate individual accidents.

Mr. KING. That is correct.

Mr. GOLDWATER. That is very clear. You are saying to me that you do not have the authority, however, to take a look on industrywide patterns or procedures or habits; is that correct?

Mr. KING. Yes; we do. What we did in the en banc hearing was to do that. That is why we talked to 45 carriers, brought together our accident reports, so that we do have the capacity to do that. When you ask for a universal statistical base, do we collect and maintain on an ongoing basis; no, we do not.

Mr. GOLDWATER. Do you have the authority to do so?

Mr. KING. Well, let us see. I have our authorization statute. We are empowered to issue periodic reports to the Congress, Federal, State, and local agencies concerned with transportation safety and other interested persons, recommend and advocate meaningful responses to reduce likelihood of recurrence of transportation accidents similar to those investigated by the Board, propose corrective steps to make transportation of persons as safe and free from risk of injury as possible, including steps to minimize human injuries from transportation accidents; initiate and conduct special studies and special investigations on matters pertaining to safety and transportation, including human injury avoidance; assess and reassess techniques and methods of accident investigation and publish from time to time recommendations of procedures for accident investigation.

In broad terms, as you know, at our dispoeal, we have about 134 people who work in the aviation mode. As you are also aware, the number of major accidents we handle, plus the other work that we do—it is a question—I gather that if you are saying, Can you collect all of this material, I imagine the Board could; at the sacrifice of accident investigation, we could do it. The question is the tradeoffs.

Should it be done? The answer is probably—I do not quarrel with your question——

Mr. GOLDWATER. The answer to my question, you are equivocating on. You either do have the authority, or you do not.

Mr. KING. Could we go out and gather that kind of data? I assume we could.

Mr. GOLDWATER. I think you can, too, from listening to the words of whatever law that is.

Mr. KING. That is what I am saying. I do not have any problem. I assume we could.

Mr. GOLDWATER. Now, during our discussion, you said that you do not have the resources.

Mr. KING. That is correct.

Mr. GOLDWATER. So I think it is very clear you do have the authority to do this kind of analysis, to report to Congress on aviation safety, or whatever it said there.

But you are telling us that you do not have the resources. Have you ever come to the Congress and asked for the resources?

Mr. KING. No, because at this time, we feel that by taking a sample, we have made a recommendation back in 1972 that the question on duty hours should be looked at by the appropriate agency, the FAA. They responded and said they were. As I said, we will be celebrating the eighth birthday of that this May. We have been looking forward to that response for some time.

When a regulatory agency tells us they are doing the study, I do not think it is unreasonable for an agency such as ours to assume the agency is dealing with us in good faith.

Mr. GOLDWATER. Well, it was just unclear in my mind whether you understood whether you had the authority or not.

Mr. KING. Yes. We have a broad enough mandate. I am sorry. I thought what you were asking was whether we had in fact gathered that material, and the answer is "No."

Mr. GOLDWATER. I know you have not. I was asking the question whether you have the authority, and if you have the authority, why haven't you done it. And you responded by saying that you did not have the resources. If you do not have the resources, you could come to the Congress and ask for those resources, it seems to me. But obviously——

Mr. KING. But as I say, in the past 8 years, with the FAA telling us they were doing that, it was our assumption it was something we did not really have to look at, other than the individual accidents.

Mr. GOLDWATER. Well, I think the record is not particularly that good as far as the FAA responding to the NTSB's recommendations. Or, I think it is going to be questioned whether it is that good. And NTSB, being independent, certainly should act independently, and not necessarily in lockstep with the FAA. I mean, you should be the driving force, pushing the FAA to in fact do these kinds of things. And on this particular issue, I understand that it is being analyzed, and there is a rulemaking procedure in the works.

Mr. KING. Right.

Mr. GOLDWATER. But obviously, there are other areas, especially in the area of human factors, that the NTSB, it seems to me, ought to be gathering information on to support its recommendations.

Mr. KING. In no case, though, do we want to duplicate another agency's efforts, and that would be a poor use of our resources.

Mr. GOLDWATER. On February 13, the Ways and Means Subcommittee on Oversight held hearings on the relationship between commuter safety and the aviation trust fund. You testified at those hearings, I believe, and there was quite an argument on the subject of instrument landing systems, ILS's.

I would like to recap that argument as fairly as I can, and then get your opinion.

Proponents of one side maintained that just about every instrument pilot prefers ILS approaches to VOR or ADF approaches when it comes to safety. We should therefore install ILS's at each airport served by commuters.

Proponents of the other side, mainly the FAA, maintained that ILS's are no safer than a VOR or an ADF approach, because the weather minimums are adjusted accordingly. For example, typical

ILS minimums are one-half mile visibility and 200-foot ceiling, whereas typical VOR minimums are 1 mile visibility and 400-foot ceilings.

Accidents with either type of approach occur when pilots bust minimums, which is an enforcement problem, not an equipment problem. An example of this is the Air New England Twin Otter crash at Hyannis, Mass.

Now, it seems to me that the NTSB accident data should be able to shed some light on this argument that I just restated, that took place in the Ways and Means Committee back on February 13. I know you discussed this general area in response to Mr. Levitas, but I think what I am looking for is a bit more hard data, and not just opinions, more analysis of past actions.

I wonder if you could analyze this and either address it now or submit it for the record.

Mr. KING. We will supply that for the record.

Mr. GOLDWATER. You understand what I am looking for?

Mr. KING. I believe we do, as I look at the panel.

[The following was received for the record:]

NTSB SUBMISSION

In a purely academic sense, the levels of safety afforded by an instrument landing system (ILS) are equal to that provided by a nonprecision instrument approach—VOR, ADF, a localizer-only approach, or an ILS-to-a-circling approach. The Federal Aviation Administration is correct in their position that the approach minimums are adjusted to insure that, if properly flown, each type of approach will allow a pilot to make a safe landing or a missed approach. However, the practical values of precision verses nonprecision approaches must also be considered to assess accurately the comparative levels of safety in the user environment.

Approach and landing accidents which occur in instrument meteorological conditions (IMC) result, to some degree, from the inability of the pilot to acquire or assess the available visual cues. The 3 critical assessments he must make are: (1) the distance of the aircraft from the runway threshold; (2) the altitude of the aircraft in relation to a 3-degree glide slope; and (3) the lateral displacement from the runway centerline. Given the 3 decisions, an ILS affords a significant advantage over a nonprecision approach. The pilot can judge his position in relation to the runway centerline and the glideslope to the point where he can acquire sufficient visual cues to complete the landing or make a missed approach. Once the aircraft arrives at the decision height, the pilot normally would continue the same descent profile that was established when the glideslope was first intercepted. Coupled with the glideslope and localizer information, the pilot receives visual cues from the approach light system, which is a required element of an ILS. The net result is that, if flown properly, the ILS places a pilot in the optimum position to complete the landing while reducing to a minimum the need to further maneuver the aircraft in marginal visibility conditions.

Nonprecision instrument approach procedures give no altitude information, and do not, in most cases, provide as precise a depiction of displacement from the runway centerline as does the ILS localizer. In addition, approach light systems are not required elements of nonprecision instrument approaches. The chief disadvantage of the nonprecision approach is that the pilot must fly the aircraft for 2–4 miles at 400 feet to 600 feet in reduced visibility (1–2 miles) conditions while he looks for the runway. Since the localizer information provided by the nonprecision procedure is not as accurate as ILS guidance, the nonprecision procedure usually requires significantly more maneuvers to properly align the aircraft for landing once the runway is sighted.

The Safety Board reviewed 428 weather related accidents for the period 1969–1978. The accidents, which included all elements of U.S. civil aviation, each involved an instrument approach procedure. One hundred seventy-four accidents, or 41 percent of the total, involved ILS approaches, while 254 accidents, 59 percent, were nonprecision approaches. The types of approaches and the accident frequency is reproduced below.

Type procedure	Weather below approach minimums	Total accidents	Percent total
a. Precision approach:			
ILS	25	174	
b. Nonprecision:			
ADF—Straight in	11	31	
ADF—Circling	1	7	
VOR-TVOR—Straight in	25	93	
VOR-TVOR—Circling	14	51	
VOR-DME—Straight in	1	9	
VOR-DME—Circling	0	14	
ILS—Circling	2	16	
ILS—Backcourse—Straight in	0	12	
ILS—Backcourse—Circling	0	1	
Localizer—Straight in	4	20	

A further refinement of the comparison for the years 1968–1972 indicate that air carrier/supplemental air carrier accidents which occurred duirng an instrum approach procedure, 47 percent of the accidents involved an ILS, while 53 perc occurred during nonprecision instrument approach procedures. For air taxi corporate/executive operations during the same period, 35 percent of the accide involved an ILS while 65 percent involved nonprecision apprcaches.

It must be noted that since the FAA does not record the total numbers precision (ILS) and nonprecision instrument approaches, a comparative rate can be determined for the 428 accidents referenced. Without this exposure data i difficult to make a statistical comparison of the safety levels for the types instrument procedures. However, we do believe that based on the total accide and the comparison shown therein, the precision approach environment show lesser accident frequency than does the nonprecision environment.

Mr. GOLDWATER. Last year, the Public Works and Transportat Committee spent a great deal of time on the so-called age 60 b

A recent commuter accident brings to mind some aspects of t controversy. I refer to the fatal crash of an Air New England Tw Otter, Hyannis, on June 17, 1979. The captain who was killed w almost 61 years old.

First, I would like to ask you about the pilot incapacitat during the age 60 hearings. Proponents of increasing the age li maintain that pilot incapacitation issue was a red herring. T said that the failsafe crew concept would result in early detect of pilot incapacitation by the copilot.

However, your finding No. 20, at page 21 in the accident rep states—and I quote: "The probability of the first officer recogni and reacting to any possible psychologic incapacitation in the c tain was remote." End of quote.

Could you discuss the pilot incapacitation in a bit more de and describe some of your difficulties in determining whether p incapacitation was a factor in this or any other accident.

Second of all, on page 16 of the Air New England accid report, the Board states, "The Safety Board believes that the mu ple stresses which contributed to the captain's psychologic fati in concert with his personal flying habits—disregard for procedu and lack of communication with the first officer—and his contributed greatly to a marked human performance degradati So the second part of my question is could you describe in m detail how his age may have contributed to a marked hu performance degradation.

Mr. KING. Mr. Hendricks?

Mr. HENDRICKS. In response to the first part of your question, on finding No. 20, there were two factors involved where we believe that it would have been difficult for the first officer to determine if the captain was incapacitated, or would have been inclined to be incapacitated. One was the very nature of this captain, which we determined through investigation that he was a very uncommunicative type of an individual. He was very lax in his checklist responses or questioning. No. 2 the darkness in that particular aircraft cockpit.

For these reasons, we believe that in this case, it would have been difficult for the first officer to detect incapacitation if such were the case.

Mr. KING. On the question of age, I believe at the hearing, a physician testified on the age question and said because of his age, "I, during our own discussions, raised the fact that, had he been 300 days younger, would there have been an appreciable difference in the outcome of this accident." And the answer from the people I talked with was no, that the question of age is progressive, and that if you put a person a bit younger with the same kinds of physical problems and the type of reactive training and traditional response, we believe that it would have been virtually the same outcome, isn't that correct, in the discussion?

Mr. HENDRICKS. That is correct.

Mr. KING. So that what we had asked was that FAA look at the age question in relation to the 135 operations and do a careful study within the context of 135. We are waiting now to see what they will do. That was one of our recommendations that is still pending. We have not had a response yet, sir.

Mr. GOLDWATER. What about pilot incapacitation. Do you have difficulties in determining to what degree this contributes to an accident?

Mr. HENDRICKS. I believe this is the first accident which we have had where we have been looking at definite signs of incapacitation. I cannot recall another accident in recent years where we have had this problem.

Mr. KING. I would like to add that the report that you are looking at is one of the very first where we have gone into as deeply as we could, and we were permitted, on the case of human factors. It is really our first probable cause where we deal almost entirely with this particular point.

Mr. GOLDWATER This is the first time that you have ever done that?

Mr. KING. No. It is the first time we have had a probable cause reflect this as a cause, the entire human. Usually it is a man-machine interface or something of that nature, as you have human judgment. But this was this total, very subtle kind of breakdown of response.

Quite often, if the pilot survives, we would not have the opportunity to have as complete a medical record as we had. A lot of the documentation on this that was taken, we could not have gotten had the pilot survived.

Mr. GOLDWATER. Well, have you analyzed how or to what extent this gentleman's age may have had a contributing factor?

Mr. KING. Again, with the physician who testified indicated that he believed that age played a role, but it was not critical. As I said, the aging process is a continuing thing. I must now, at my age, reflect back that I am not quite the same person in some ways that I was several years ago, in different areas; on others, I may have improved.

Mr. HENDRICKS. May I expand just a little? Years ago, the FAA had a program over at Georgetown Clinic, where they had a number of pilots of various age groups, various types of flying, military, commercial, airline, and so forth, where they were attempting to determine in a clinical way the aging process of the human body. And I believe the testimony that we received up in Massachusetts from the doctor with regard to this particular case was that as we get older, our arteries get harder, et cetera, and a number of different factors affect the health of an individual human being. With respect to a particular age, it depends on the condition of that particular human being.

Mr. GOLDWATER. I am just wondering whether it would have made a difference if that pilot had been 35 instead of 61.

Mr. HENDRICKS. Again, do we know to what extent the long duty day and his particular physiological condition affected his reaction time and perception of the situation. We could suspect that perhaps a younger man would not be as affected by the long duty day, the lack of food, or number of landings and the rigorous physical activity involved in flying, and at 35 years old, he might be able to sustain that, and for whatever reasons incapacitation played in this accident, may not have occurred in a younger man. But this would only be dependent on his particular physical condition.

Mr. KING. Again, to share the other side, we had a rejected takeoff at LAX of a DC-10, 2 years ago March. The pilot in command, it was the day before his 60th birthday, and this was going to be his last flight. His reaction time to the rejected takeoff was faster than they could duplicate with test pilots many years younger.

Mr. GOLDWATER. This was what airline?

Mr. KING. It was Continental DC-10 on a rejected takeoff at LAX. So that you do get a mix, and I think what we are saying is that the aging question is a question of where you draw the line on performance. But there are individuals that can fall on either end that could be virtually physically incapacitated at age 35, for all intents and purposes, so it is a question of dealing in that universe.

That is why we have asked for the study.

Mr. GOLDWATER. Obviously, it is difficult to really understand this total process, because you are dealing with individuals, and every individual is different, obviously.

But this is an interesting question, and one that Congress has found fit to get involved with. And it seems to me that it would be quite appropriate to continue your obvious active concern about incapacitation, aging factors, et cetera, to help not only the industry, but the Congress, to better understand it, if in fact we ever will—I am not totally sure we will. But I think it is good that you are looking, or at least in this instance, anyway, and I hope it continues, to delve into human factors and exactly what and how they do contribute to accidents.

I became greatly concerned during age 60 about circadian phenomena—jet lag and flying on the backside of the clock and flying across time zones for long periods of time. That is a human factor phenomenon that either enhances or degrades your performance as a pilot or as a human being, whether you are a computer operator, or a truck driver, or an airplane pilot. That is another human factor situation.

And it seems to me that instead of just listing as contributing human factors, and let it go at that, this is an area ripe for you to pursue, even greater than you did on the Air New England crash, and I am hopeful that you will.

Mr. Chairman, I have one last question. On weight-and-balance, will you explain why weight and balance limits on smaller commuter airlines seems to be so much more a problem than it does on the larger airlines used by the certificated carriers?

Mr. KING. Mr. Hendricks?

Mr. HENDRICKS. I think basically what we are looking at with the commuters is a smaller aircraft that has less tolerance, or should I say less margin of performance, than you see in your larger aircraft certificated under part 25. The differences in performance, say, between a Twin Otter and a DC-9 are vast.

One of the problems we have noticed is that on these smaller aircraft lately, the accidents that we have investigated, almost all of them appear to be operated in the area of maximum gross weight takeoff, and where the margins of performance are not as great as you have in the larger aircraft, when a problem develops such as an engine failure on takeoff, the reaction to it had better be right on the money, and it had better be accurate, and the pilot had better be trained to handle it, or chances are he loses the airplane.

In the air carriers, we do not find this as great a problem. The margins of performance are usually more in excess.

Mr. GOLDWATER. So margin of performance is the criteria on weight and balance?

Mr. KING. It denegrates the performance of the aircraft, but it brings to the point of your ability. For example, I mentioned Prinair, earlier as a weight-and-balance example, Prinair had two other very, very serious incidents that probably should have brought them in. The only reason they survived was that, as I mentioned earlier, the pilots had to have 4,000 hours before they get into the left seat. In both cases, we had men in the left seat who had a lot of time. And when a problem occurred in one case, the fellow reacted in fractions of a second to recover. He did exactly what he had to do, and he did it instantly, and just barely got back. In the other case, the pilot he was trying to react, but he was so far out that he could not quite recover. He knew what his problem was, he diagnosed it instantaneously, leaned back, shouted for a couple of kids, who had asked to see the takeoff, to run forward. They literally climbed up, and when their weight shifted forward, the plane came back in. Now, because the pilots were so well trained, these were recoverable incidents. They should have been accidents.

The thing that troubled us was that the FAA knew about these incidents. They knew about them long before the Prinair accident in the Virgin Islands. It is also a problem of poor ground crew

training and performance. It just is not fair to the people who are flying these aircraft to say, Well, you are supposed to be responsible—all they can do is verify that sheet that they get reflects is the math correct, is their center of gravity at the correct moment and it all looks OK. The assumption, though, is that the data that they receive is accurate, and quite often, it has not been.

Mr. MINETA. Would the gentleman yield?

Mr. GOLDWATER. I just wanted to conclude it.

Mr. MINETA. Go ahead.

Mr. GOLDWATER. What you are saying is it may be an operational procedures problem of ground crews and pilots working together to determine proper weight and balance prior to takeoff. I also get the impression that you are saying that it could be a certification problem, that in certificating these aircraft used by commuters they are not requiring or building in the margin that you find on the larger 727's and DC–9's.

Mr. KING. Well, at your gross weight, your margin would be lower, so 150 pounds would be far more critical in the kinds of planes we are talking about. It would be much more, say, in a 727 or a DC–9. It is that the planes are small enough——

Mr. GOLDWATER. Isn't it relative, though, 150 pounds' worth on a 5,000-pound aircraft versus the same weight on a 727—is a greater margin of error?

Mr. KING. It means that you have to pay closer attention. That is what we were saying about the system, the links in the chain, that that is the part of the system that is very critical. You train for the arena in which you are in; what is going to be expected of you. And this becomes, as you have stated, a critical part, and as we are very sensitive to a critical part of having a safe operation.

You cannot have people who are doing this kind of work——

Mr. GOLDWATER. All right. What about the aircraft itself? Mr. Hendricks says there is a greater margin in a larger aircraft than there is in a smaller one. That seems to me to get down to the certification problem.

Mr. HENDRICKS. The performance margin is greater, and I think the criticality of the weights being added in a smaller aircraft are more significant with respect to weight and balance problems and are, therefore, more critical in the smaller aircraft than in the transport category aircraft.

Mr. GOLDWATER. But should it be?

Mr. KING. The nature of the beast provides that, but if it is operated within its certificated limits, it is OK.

Mr. GOLDWATER. I understand that.

Mr. HENDRICKS. I think we are moving toward the right direction with part 24, for these commuter type aircraft.

Mr. GOLDWATER. Thank you, Mr. Chairman.

Mr. MINETA. If I could follow up on that question. It is not so much in my view certification as it is the difference, let us say, between a plane that has a gross takeoff weight of 8,000 pounds and another plane that has 100,000-pound gross takeoff weight. And I come running up with two 30-pound bags and say, "Quick, I want to get on flight 121," and jump on there. That becomes critical as far as the 8,000 pounds, but in the 100,000-pound plane it gets washed away in the weight of the plane.

Mr. KING. The plane is not as tolerant to these factors, and that is why approximations are not a valid way to do your loading.

By the way, let us really make the thing critical. I will assume that I am your aide and I am carrying your two bags; now we are in deep trouble.

Mr. MINETA. You stay behind; the bag goes. [Laughter.]

Mr. KING. But your point is well taken. It is less tolerant, and therefore, I am less forgiving, and therefore, it requires greater skill and greater sensitivity to that issue.

Mr. MINETA. Let us take, then, the example specifically of the Prinair accident in July 1979. That complaint has been a repeated complaint of the pilots, as to whether or not that thing gets put in the front baggage compartment or in the rear.

What, as a result of that accident, was your recommendation?

Mr. KING. On this one, I believe that while we were at the hearing site, the FAA suspended Prinair's ability to fly. The FAA went through a list including the weight and balance, which we identified as the critical factor along with inadequate training of the ground crews.

Our recommendations went to the crash-fire-rescue aspects of the accident which had not been dealt with by the FAA in their action with Prinair. The FAA's action in Prinair seems to have brought about a change.

Mr. MINETA. But that plane was beyond the gross weight takeoff allowance.

Mr. KING. By, I believe, slightly over 1,000 pounds, and on its aft CG, I believe it was 7.9 inches of aft CG, which meant that the aircraft was doomed.

Mr. MINETA. Now, who has the responsibility to make sure that the plane is in weight and in balance? The flight crew, ground personnel, the dispatcher we were talking about that is not there in a commuter carrier, as it might be with a trunk carrier—whose responsibility is this?

Mr. HENDRICKS. There are a couple of points of view on this. The pilot is responsible in terms of the ultimate responsibility for insuring that his aircraft is within proper weight and balance limitations. In this case, the pilot is required to sign a sheet, a weight and balance manifest, wherein he certifies that the airplane is within those allowable parameters.

Mr. MINETA. Well, what does he do? Does he say to the ground personnel, "Is it OK?" And they say, "Yes, it is OK, chief, go ahead." How does he really, in fact, know that that thing is not overweight or tail heavy?

Mr. HENDRICKS. He has a sheet before him which indicates the various loadings of the various compartments, the number of passengers onboard, the amount of fuel onboard, and the total weight and the CG for the aircraft. He reviews this and notices the numbers that are on there, and if anything appears to be out of line or out of tolerance, he should have it investigated. If everything is correct, he signs the paper and authorizes the aircraft as being correct.

Mr. MINETA. Is he in a position to say to the 8-year-old kid, OK, you go to the back seat, and Jim King, you go to the front seat"?

Mr. HENDRICKS. This was part of the discussion. On this type of an aircraft, should he be able to look in the baggage compartments, or should he be able to detect what the weights of that baggage would be, and take a look at the interior of a cabin and move people around, within the time parameters that he is on the ground.

Mr. MINETA. And at the same time he still got to leave at 11:37.

Mr. HENDRICKS. And he has still to leave at 11:37. We did not believe that it was practical for the pilot to have to do this.

Mr. MINETA. But in the case specifically of Prinair, this had been a historical problem with them, had it not?

Mr. KING. Yes. The pilot's problem was compounded because he would not know what was sitting in that rear compartment. In addition, the carry-on baggage was far in excess of anything that had been recorded, and they ended up with a thousand pounds beyond where they should have been and with an aft CG that was totally out of the question.

Mr. MINETA. Given the fact that this was a historical problem with Prinair specifically, what was FAA's response?

Mr. KING. Well, their reponse, once we got to the start of the hearing, and it was indicated that this had been a historic problem—I believe we were on the third day of the hearing—FAA announced the suspension of Prinair during the hearing.

Mr. MINETA. But that was for 3 days.

Mr. KING. The suspension? They felt that the training could be done and that the work would move along, and in their judgment they felt that Prinair was going to be sensitive to that. We did not have the capacity to make a judgment on that. That really is FAA's arena.

Mr. MINETA. So once they went through the training, you do not go back at all.

Mr. KING. No; that is FAA's responsibility. As I said, we really act in good faith on what FAA tells us—unless we come back on another thing and that comes under question.

Mr. MINETA. And this is what you would refer to as lack of management support?

Mr. KING. Again, FAA, the officers down in that area knew about this as a continuing practice, as we understood afterward both here and Antilles Airboats, to cite just two specific examples that we saw, and it continued. It continued after the office knew about it.

Mr. MINETA. Given it is a historical problem with Prinair, how would FAA know of that history of it being a problem, as far as weight and balance is concerned, to be able to bring to Prinair's attention that they have a loading problem?

Mr. KING. FAA has a number of tools to do that. They have a variety of things that they can do. I mean, they said to us, by the way, at our discussions that they know a good apple from a bad apple. They can spot them, and they will increase surveillance, et cetera. The FAA could probably better speak to whether the surveillance was increased after this program, but we found a situation in this specific accident that was serious and it was clear that the people on the ground did not know a good deal about what would keep an aircraft in the air.

The assumption was that if there is room, stuff something in there.

Mr. MINETA. How long would you say that that history of weight and balance problem at Prinair had existed?

Mr. KING. Our investigation documented that Prinair had experienced weight and balance problem since 1975.

Mr. MINETA. And then had you brought these to the attention of the FAA?

Mr. KING. No; the pilots had brought it to the FAA's attention, and the two incidents we talked about, which sound a little bizarre, but are absolutely true, were both known to FAA; people locally at FAA knew both stories prior to our hearing.

Mr. MINETA. And at one time, did FAA ever consider or suggest that base inspections or formal surveillance not be conducted on Prinair for a period of 1 year?

Mr. THOMAS. I believe that that statement came out of a Prinair-published document, sort of like a newsletter, and it was made by the president of Prinair. As to its absolute true validity, whether it was a quote or whether it was a paraphrase or whether this is what the president felt his conversation indicated, it was a 1975 occurrence, but that did not come from an official document.

Mr. MINETA. Thank you.

Mr. Fary?

Mr. FARY. Thank you, Mr. Chairman.

Mr. King, have you found a high degree of safety concern on the part of most commuters?

Mr. KING. We have two problems, and let me share them. The first one is that when an accident happens in aviation that truly is abnormal—all we see are accidents, so understand the scene in which we find ourselves. It is very similar to getting home and asking someone who works in the hospital, "Did everyone look healthy today?" We work in an arena where the unhealthy are the norm.

As far as the commuter industry as a whole goes, and the operators that we have seen of varying sizes care about safety for a number of reasons. Many feel, because they literally are taking the public's lives in their hands, they have a moral commitment to deliver the safest possible service of the state of the art. And that, I would daresay, would be the general tenor of the industry.

We raised the question of the bad apple operator, and the answer we got from virtually all of the parties was "Yes, they are identifiable." And they were identifiable not on the simple basis of an economic barometer, but on management attitude and philosophy. They said that they could detect that; FAA testified in a similar manner.

So I want to be responsive to your question, but FAA would also have a broader view of the industry.

Mr. Ferguson, you coordinated the field operation when we went out. What was your experience with 45 operators and the feedback you received?

I know you did not do them all. I know the field staff did. But what was the final, the general attitude that came in?

Mr. FERGUSON. On their feeling of safety and safe operation?

Mr. KING. Yes; excuse me. Dave Thomas says that he did the FAA field regional offices and the GADO's. Dave?

Mr. THOMAS. Sir, there is certainly a high degree of concern with safety. Virtually all of the operators we talked to stressed unequivocally that safety before any other aspect of their operation had to be considered, and this was the overriding factor in their programs.

Mr. FARY. Now, where an accident has occurred to an airline which is evidently experiencing financial difficulties, have you determined whether this is a factor adversely affecting safety?

Mr. KING. We do not do that per se. The financial audits are done by CAB. When we come in, if we see an operation where we uncover problems, they sometimes can show that there may be financial problems. But we have not seen that across the board. My first commuter accident, I think, was AAI in Alaska. We thought its performance at that time left a great deal to be desired in the safety area, so it had nothing to do with the economics.

The Prinair accident that we talked about is certainly a very successful economic operation. There was lack of attention to a specific area that was on the ground, in the training of those grounds crews.

So that it is a management attitude toward getting all of those links that could lead to a serious incident, getting them all up to par so they can do the best possible job.

Mr. FARY. Has the NTSB ever issued any guidelines to potential passengers concerning what to look for in selecting a safe airline and what would they be?

Mr. KING. And should there be? My answer to that would be yes, sir, there should be.

Mr. FARY. In the course of investigations, have you or your investigators ever encountered serious anticommuter airline feelings on the part of passengers or the general public, and where and what would they be?

Mr. KING. Well, generally, no. I think there is a problem with plane size; we run into that, at least from the testimony we have drawn. If people are not expecting the aircraft—for example, you go to National Airlines and you fly to, let us say, Steamboat Springs, to go skiing this weekend. We arrive in Denver via whatever—I will let you pick your air carrier. We are ticketed out of National, and we arrive in Denver, and at that time we get onto, quote, "a small plane." Well, we might be a little distressed because we are used to the accommodations of a larger plane with bigger seat and other creature comforts, but I think the assumption is that the pilot and the level of care that is given, there is a continuum, because after all, the Government is involved in it, and flying is very safe.

So there is that thought. And then we fly on to Steamboat Springs. And the thing that comes back is first that the standards of care that are established by Federal guideline are not the same that the public is not aware of that, and that everything—if there is interlining, there is no question on ticket stock. The symbols are on there, and unless you are a sophisticated flyer, to translate those are a bit difficult. Your baggage can be handled on through baggage. So there are none of the cues that would say to you that

you are going to transfer to go there. And when you arrive at Steamboat Springs, at that particular airport, if I am not mistaken, if something should go wrong, there is not a crash rescue capacity at that particular airport, nor does there need to be in that particular type of operation.

So that the level of care that you expected when we left on this holiday is not necessarily going to be provided to you at the same level during your entire trip. Yet all of the kinds of things that you may make the judgment on for your trip would not lead you to believe that.

Mr. MINETA. Would the gentleman yield on that?

Mr. FARY. I yield to the chairman.

Mr. MINETA. Should there be a minimum amount of flight time, then, required in the 135 regulations on multiengine hours to command a plane?

Mr. KING. I would say yes if you won't ask me how many, because I don't know how many, what the actual number would be. I would have to yield to the——

Mr. MINETA. There are some companies that go ahead and require a minimum number of hours of their command pilots——

Mr. KING. Yes.

Mr. MINETA [continuing]. And copilots.

Mr. KING. Yes.

Mr. MINETA. But it's not in the regulations as I understand it.

Mr. KING. That's correct.

Would you like to just expand on that, Mr. Thomas?

Mr. THOMAS. Rather than stress numbers again, certainly the most important aspect here is the training that the individual pilot gets. If a pilot is well trained in an aircraft, and he's got a dynamic, viable training program, hours and experience are important, but it's the firsthand experience and how he's trained to deal with the emergencies firsthand that's of utmost importance; and second, a subjective number of hours would——

Mr. MINETA. Have you investigated any accidents where minimum flight experience has been a deciding factor?

Mr. KING. Oh, yes.

Mr. THOMAS. Yes, sir, we have. Universal Airways comes to point. Universal Airways, again, is an accident where numbers may be misleading, because the captain of a single-pilot operation did have enough hours to qualify; however, he only had about 140 hours of multiengine reciprocating time—that's commuter-type flying—the rest of his was Navy jet flying; so, while he had numbers of multiengine hours, in point of fact, his experience in the type of airplane he was flying was very minimal. So, it all goes down to the training program followed up by a minimum level of flying experience.

Mr. MINETA. Do you have any recommendations as to what would be considered minimums as far as flight pilot training programs?

Mr. KING. You put your finger on it. The hours in and of themselves are valuable; but the training program is critical. If you learn, for example—I think we were talking about the on approach coming into Hyannis, here was a pilot with a lot of hours, a lot of experience, but had developed somewhere in his training regime

very poor habits; so that when he started to fail, there were n
cues to the first officer who was to back him up if this was happe
ing; and had he been properly trained and that training mai
tained, there might very well not have been that accident.

So, the training, the type of program, to some degree, has to b
customized for the area where you're flying, because you'll b
facing different types of weather, different types of problems. So,
can be individualized for your particular area to serve the comm
nities you're out there to serve. But the training program becom
far more critical.

Mr. MINETA. Do you have any of those recommendations as
what that flight training program ought to be, given those region
geographical considerations?

Mr. KING. Do we have any on the training on geographic
considerations?

Mr. MINETA. Yes. Have you made any recommendations on tha

Mr. KING. Not specifically. We have found that between th
requirements of part 135 and the FAA surveillance of trainin
programs that generally an adequate training program is put t
gether on paper. As such the training manual will reflect th
geographical considerations that an operator must provide for
his program. We have found the system breaks down in the impl
mentation of the training program and whether or not any trai
ing is actually done.

We have made recommendations relating to survival training f
pilots operating in remote mountainous areas.

Mr. MINETA. That will be fine.

Thank you. Mr. Fary, go ahead.

Mr. FARY. Thank you.

Mr. King, one last question. What do you consider to be t
greatest hurdle that the commuters have to overcome to be acce
ed as a safe, reliable air carrier?

Mr. KING. That's a good question. I would dare say the upfro
image. Are we running a service that's running on time with
reasonable schedule and equipment that's reliable. That's an in
vidual effort of each one of the corporations involved. And aga
they're working in a system—and this is one of the things that I
very sympathetic to, because so many people have done so much
run a safe operation. They feel that, again, a few bad app
tarnish them; and they make the extra effort, they spend the ex
money, they go the extra mile as it were, and then they feel th
they are being abused; and their feeling of being let down by all
us can be justified. But they're in an industry where they're goi
to have to work, and work as hard as possible to identify alo
with the FAA the bad apples, and say this is a bad apple a
doesn't belong in the business of transporting people in an envir
ment that's terribly unforgiving. And yet it's been proven that
can make it safe, and make it safer if we will work together to
that. And that's what's got to be done. It's working that system
that it does work, and that's going to take a commitment by
number of people.

Mr. FARY. Thank you very much, Mr. King.

I yield back, Mr. Chairman.

Mr. MINETA. Mr. Clinger?

Mr. CLINGER. Thank you, Mr. Chairman.

From what you've testified here this morning, gentlemen, it seems that there would almost have to be a relationship between poor FAA supervision and inadequate maintenance, and really you couldn't have inadequate maintenance if you didn't have poor FAA supervision.

Are we looking at a situation here where the FAA supervisors are not really conducting thorough enough examinations or inspections, or where they're not as well trained as perhaps they should be? Following on that, has the Board conducted any inquiry into the selection and appointment of FAA maintenance inspectors, especially with regard to their training, experience, and work hours?

Mr. KING. Mr. Ferguson, would you like to respond to the first?

Mr. FERGUSON. We did look into the regional problem of surveillance, both from the operations area, and in the maintenance area.

Now, the overall figures for principal operations inspectors, there are 189. For the principal maintenance inspectors, there's a total in all the regions of 160; electronics inspectors, 69.

The total number of commuters in all these regions is 321.

Now, from our investigation, we found that some principal officers are handling as much as six commuters. They also have other work to do.

At the Houston FSDO—that's the flight standards district office in the southwest region—these inspectors had 99 air taxis they had to surveil as well as the 4 commuters under their responsibility; and in the FSDO they had 3 principal operations inspectors. That meant they had to keep an eye on 33 air taxis.

At the same time, that FSDO had 155 authorized inspectors that had to be surveilled. They had 54 repair stations. They had 79 agricultural operators. They had 16 flying schools. They had 200 noncertificated flying schools. They had one mechanic school. They had 215 corporate operators of larger turbine powered aircraft; and on, and on, and on.

Mr. CLINGER. Well, the problem really is one of being understaffed rather than lack of training, or inadequate training?

Mr. FERGUSON. That's correct. I would suggest that, yes, sir.

Mr. CLINGER. But it still could result in a shortcircuiting of the inspection process, given the workload that they have?

Mr. FERGUSON. Yes; and then the FAA decided to go on an increased surveillance of commuters, and added another 14 items for the first year of operation under the new 135, which added an added workload to these inspectors so that some of these other items had to priortized, put further down the line of importance. So, these—and that, I believe, goes across the entire system in the FAA. Every region has personnel problems; not enough staff.

Mr. CLINGER. This would be directly attributable to the explosion in the commuter aircraft industry, really?

Mr. FERGUSON. Yes, that is correct.

Mr. CLINGER. It's my understanding from discussions with commuter airline mechanics, FAA inspectors are seldom if ever observed during the times when most commuter maintenance takes place; that is, between the hours of, say, 10 or 11 in the evening, and 7 a.m. in the morning.

Have you conducted any observations of this phase of the FAA's observation, or operations?

Mr. FERGUSON. Not in those particular terms, but we did—well, we did have one chief of a GADO tell us that he's only operating 55 to 60 percent of his capacity. And the FAA, like most people, like to work from 9 to 5.

Occasionally, they would put a special effort forth. We did not look into when they did their work, per se, whether they did it after midnight or not. But, for instance, on Saturdays when there's a lot of weekend warrior activity, they did take their inspectors out en masse to, say, one airport, and do a job. But I did not look into whether they check maintenance at midnight, during nocturnal hours.

Mr. KING. It had been testified to that occasionally inspectors did come in. I believe in this case, we had a witness at our hearing who indicated that it was a rare thing, indeed, to see them, but they did come by. But the one thing that struck him was the FAA never talked to any of the mechanics. They would talk to the supervisor that would be there, but never talk to mechanics. He never had a recollection of having anyone talk to anyone who was actually doing the hands-on work and saying, "What are you up against, what's happening here," et cetera.

Mr. CLINGER. But they were there during the time that the maintenance was being performed, but weren't talking to the people that were directly doing the maintenance?

Mr. KING. Yes, he said that there wasn't—in some cases he said it depends on who you talk to, but in this case, the mechanic said that he didn't see them in night maintenance; and others testified that occasionally they would drop by. I think my impression I was left with, it was a rarity.

Mr. CLINGER. One of the things you mentioned in your testimony, Mr. King, that had come out during your hearings was the fact that many of the operators objected to the fact that FAA tended to stress enforcement instead of assistance.

I'm wondering if you could elaborate on that a little bit. I gather that some of the testimony indicated that there could be a lack of understanding of what some of the regulations required or what was required of the operator, and that they having misinterpreted that, they went ahead and did something and then were penalized by the FAA for failing to comply with the regulation. Has that been fairly common in your experience?

Mr. HENDRICKS. I think this is one problem that we have found in our investigations. It appears that much of the surveillance is enforcement oriented rather than helpful in nature. In fact, we had testimony in our Downeast hearing from a pilot who went to the GADO to complain of various pressures being put on the pilots, and there was no action taken at all by that GADO. In our conversations or testimony from the FAA with this respect, I believe they indicated that unless there were violation items that could be processed, that they had no—I hesitate to say responsibility, but they had no reports they could take against the company. But this was the substance of the testimony that we received, that unless there were violations to be processed, the FAA didn't provide any help to the pilots or to the company.

Mr. THOMAS. Another aspect of that, sir, is almost a Catch-22 thing. The FAA, their inspectors have told us on an individual basis, and there's been testimony, are somewhat shorthanded at the GADO; so if they go into an operator, they don't have time in many instances to sit down and to provide an assistance oriented visit. And as a result, they find things that perhaps would have been corrected had more time been able to have been spent aiding the people. So, the question is, would a lot of the shortcomings be corrected if the FAA had more time to sit down and corrected once and for all, and then would that cause the FAA's image to back off as an enforcement rather than an assistance oriented agency.

Mr. KING. I think all too often it's like the traffic cop policeman who might take the children across the street. Nobody ever recognized that, but if he gets back at the end of the day and says "Here's 14 or 100 tickets." So, the question is, "Where was he really performing the greater good?" I'm not sure. It's just a question of your philosophy. There might be a mixed thing where you could do both.

Mr. CLINGER. I have two other questions. Following up on the last one, I'm informed that there have been actual cases where an operator may have committed a violation sometime in the distant past, and when the FAA discovered the violation it has taken action to suspend the operator's certificate months or even perhaps a year later.

Do you have any comments on this?

Mr. KING. I've got a problem with that, because it moves us out of the safety field. We sit in review of airmen's tickets as judges. We are directed by law, directed merely to review the record and the documents before us on our review, and it becomes a judicial proceeding. So, it's something that I can't really comment on.

Mr. CLINGER. You have said that there really is no correlation between the economic stability of the company and accident rates?

Mr. KING. It's not basically a red flag. Originally an awful lot of folks thought that the moment you went in, the immediate thing was that the company would start cutting corners on the critical safety items. It's just generally been the experience of the people who testified that that wasn't the case. Sometimes that could happen. That could create such a pressure where they might try. But it was a management philosophy pretty much determined it, and if you were a trimmer it didn't make much difference whether you were a rich trimmer or a poor trimmer, you were a trimmer.

Mr. CLINGER. That's what I'm getting at. How do we insure that we have quality management?

Mr. KING. Well, the interesting thing was that the FAA, virtually to a man, said that they could spot a bad apple. I can walk in and I can spend some time in a place, and I'll tell you I know a bad apple.

Mr. CLINGER. You mean just by intuition, or by a checklist?

Mr. KING. He said, "I have little checklists that I look at and if I start to see certain things I know I'm in the presence of a bad apple." Everyone who came in said they had their way to identify them. I'm not sure they all had the same list. We didn't pursue it that far. There wasn't a one who said but that, "Boy, you bring me in, I can smell an apple."

Mr. CLINGER. We need a bad apple rule here.

Mr. KING. Well, the phrase "bad apple" is my thing because that's what I came back to. The commuter operators is a group that's been hit by this brush, and really what we're saying is, it's individual performance, failure of particular individuals; and the whole industry suffers because of them.

Mr. CLINGER. So that we really aren't going to get a handle on it by writing more detailed regulations or imposing more controls as long as it comes down to the fact that there's a basic management philosophy——

Mr. KING. But your surveillance could pick that right up and say:

OK, you're a trimmer. You're going to have someone with you, Mr. Trimmer, from now until you get out of business. I'm going to make sure you run it right if your in the business, because if your standards are low enough to keep you in business, we're going to make sure you perform so you can perform safely for the public.

Mr. CLINGER. Thank you, Mr. Chairman.

Mr. MINETA. Thank you, Mr. Clinger.

Mr. King, one frequently voiced complaint to the subcommittee from commuter operators is that their operations are monitored by FAA personnel with background primarily in the field of general aviation.

Is there so much of a difference in the two types of operations that the FAA inspectors should not have both general aviation and commuter airlines assigned to them at the same time, and should there be a specific training program for each of these two specific classifications?

Mr. KING. First, Mr. Chairman, we felt back in 1972 that there should be a separate section for surveillance. That goes back—we still feel the same way today. But I'd like to ask Mr. Thomas to answer your question in more specific terms.

Mr. THOMAS. In 1972, we did specify that the new part 135 should differentiate between the commuters and the air taxis. I think it's an established fact now that your commuter airlines are a tremendous part of the air transportation system. They are a sophisticated entity. They fly smaller but just as sophisticated aircraft. There's only one level of training, and that's the best. The maintenance nowadays is required to be excellent. Testimony at the hearings said that there's no more on-the-job training acceptable for commuter airline mechanics. They have to be school trained.

So, the commuter industry has probably passed the point where they can be lumped together with general aviation, and they have to be recognized as airlines. Airlines are surveilled by trained FAA inspectors at the United, Eastern, and Delta level, because the FAA recognizes that there are certain needs, certain training, and there's a certain amount of understanding that the inspector has to have. This is certainly the case with the commuters. They are a sophisticated entity, and they need specially trained commuter inspectors.

Now, the FAA has stated that they have got training programs for the commuter—or new training programs for both office-type training, and equipment training; but it may be that the commuter airlines have gone out of the GADO end of it, and they're into an

ACDO-type office where you should have the commuter operators who are being surveilled only by people who are primarily concerned with the operation of the commuter airline, and the economic and the safety features and the pressures that impact on them.

Mr. MINETA. We spoke briefly about the problems at the GADO's, and part of it has been indicated as being staffing problems because of the workloads that are placed on those offices.

Your staff has conducted a review of these offices as I understand it, but have any of your personnel taken the time to check the inspection work which one FAA inspector has to perform on one commuter operator; and if so, do you have any thoughts or observations on how many certificates any one inspector should be responsible for at any one time?

Mr. KING. Well, I think there are two of us who could probably answer this. We have made recommendations back as far as 1972 which state we feel there should be inspectors whose full-time job is the surveillance of commuters.

Each region and each GADO really has to design its own workload. The question is, do you design your workload on the basis of available resources, or do you design your workload on the basis of what needs to be done to have performance at a safe level. So, that's really the issue before you. Which one are you doing your management at? Understand, now, that when we use the word "priority," the word "priority" for us—and I assume it's for everyone else—is based on a recognition that we have finite resources. Therefore, with finite resources, there are certain things we can do and certain things we can't. We try to organize our priorities, and then understand at some point we can't do the ones down here. So, it's a question of weighing which are most important.

That's why we want this type of surveillance work broken out so it will be identified. It was a commuter industry that was being looked at, that it was being handled as an individual that requires special attention. I think Mr. Ferguson, on the on-line types of things that have been witnessed, that were seen by you. Could you share those?

Mr. FERGUSON. We asked the FAA for a manhour breakdown on each type of surveillance. They were unable to give it to us, or they didn't give it to us.

Mr. KING. I was going to say, I don't think they were unable. They were unwilling, as I understand it.

Mr. FERGUSON. Now, in speaking to inspectors, now, one might be called out on a hazardous material shipment, and it's probably off in another airport; so he gets into his car and he drives 1½ or 2 hours, and when he gets there he finds out that it's not actually a hazardous material shipment. He has to drive 1½ 2 hours back to his base, and he gets no credit for that trip, because it wasn't a hazardous material flight. I don't know if this happens or not, but one inspector says, "Do you know that wet human hair will explode, will burn?" Sometimes they're getting so sick and tired of these trips that they bring a handful of human hair and wet it down and say, "Well, this is hazardous material. You'll have to dry it out, or box it properly." But there is no—we do not have, or did

we get anything from the FAA to describe the workload of the inspectors. Just the number of inspections that they have done.

Mr. MINETA. During the course of your public hearing, I understand that the CAB did testify, and that questions were asked of them relative to their activity in determining whether or not a prospective commuter applicant had a safe record.

We've been apprised that CAB testified that they checked with the FAA on this matter and did no further checking.

Is this an adequate procedure for determining the record of an applicant, or is there something else which the CAB should be doing in a more positive way to determine the past record of such applicants?

Mr. KING. Well, as I suggested, the correspondence and exchanges we saw looked to be pro forma; and we believe that the kind of analysis that should be done as far as safety by FAA should be a broader sort of thing. If it's a question of competing interests, everything should be laid out. We think that there should be something beyond what is presently being done now, at least from what was testified by CAB and FAA on the subject.

Mr. MINETA. Now, you've also raised the issue of FDR's and CVR's, and as I understand it FDR's and CVR's are required on jet aircraft over 10 seats whether the operator is a commuter or a certificated carrier, is that correct?

Mr. KING. Yes, and on turbo.

Mr. MINETA. And on turbo.

Mr. FERGUSON. CVR's are required on turbopowered aircraft with 10 seats or more. There is no requirement for an FDR on any commuter aircraft.

Mr. MINETA. Now, is that a reasonable place to draw the line for an FDR and CVR requirement?

Mr. KING. How many—I'm trying to remember the size of the commuter fleet at this time. I think the vast majority in actual numbers falls in the 10 or under. It's a question of the state of the art. If the question had been asked 10 years ago, the equipment that was available was heavy and expensive. You now have a whole line of miniaturized, lightweight, and in relative terms, inexpensive equipment available. So, what we'd like is—what are we talking about—how about the Beech 99?

Mr. MINETA. Well, I guess that would be the followup question. Should we be drawing the line at some other criteria such as aircraft over 30 seats, or something of this nature?

Mr. KING. Well, we think that they ought to take a look at it. Could the plane have flown out of it, and what would it take? So what we're talking about is, that they should be looked at, and they should be looked at as another type of tool. For example, how do you establish simulations? What is one of the techniques? How did a pilot handle himself in a given situation?

Let me give you an example. We have the most difficult time dealing with wind shear. The reason we're able to deal with some of the shear accidents was that you had wide-bodied aircraft which showed the effects of shear because they had a digital flight recorder showing the parameters of the performance of the aircraft. We could make constructive suggestions as what shear was and how you might manage it if caught in it. So, DFDR's became a valuable

tool to pass on, not just to solve that particular accident, but the learning experience to be translated into a training program so that we didn't have to duplicate the accident that we saw in another time.

Mr. MINETA. At this time I'll yield to Mr. Goldwater.

Mr. GOLDWATER. Mr. King, what is your opinion at this time on the question of overregulation versus underregulation of the commuter industry by the FAA? If you want, you can break that down into two parts, rulemaking and enforcement.

Mr. KING. Well, I think—you say "overregulation", it's a question of what it is. I'd much rather see voluntary standards established and cooperative standards. I think one of the things that struck us, for example, when we were talking duty time with the operators that we have as witnesses, I think in almost every case, they had voluntarily accepted certain duty time restrictions in relation to their pilots. I think in every case but one, they had two qualified pilots onboard. And when we said it's not required, you really have an extra person on there that's not required, you're doing all these extra things that clearly enhance safety, why are you doing it? And they said, "We think it's safer. We want to do what we think is the right thing."

Well, that's the kind of leadership that I'm talking about. That's a voluntary standard. But each one adjusts it in the area that they serve, that they feel that's necessary. In every case they were meeting minimum standards and going for beyond it—by the way, at an economic cost—at direct economic cost to them. But, they felt it provided a level of care—they put it, "It's our equipment, it's our passengers, and we want to do the right thing as far as we're concerned. We're making an individual judgment." So, that's what we heard.

On the other hand, there's a question of attitude. I think, you know, that's where we're trying to put the regulations. There seems to be an attitudinal detection in at least a few of the commuters who testified. Not all, but a number of them said there was a certain shrillness to the FAA now, you know, "Let's flog them." And they felt that was unfair, that what they were looking for was help. They were looking for a helping hand. They were looking for direction. They were looking for constructive suggestions, and every one of them recognized that there may be people who weren't functioning effectively, or who weren't doing the right thing, and darn sure someone ought to come down on them. But they were afraid an attitude would prevail that was an attitude almost of harassment rather than help, and that was where we raised the concern.

Mr. GOLDWATER. The reason I raised that was because in your testimony you talk about the fact that economics does not appear to influence the bad apples, operators who cut corners, who would do it whether there was an economic consideration or not. Obviously regulation, excessive regulation has an economic impact, which could very well eat up capital for improvements to aircraft, or operating procedures, or things of that type, that may or may not have any relationship to safety.

I'm wondering if, in fact, how accurate your statement is that economics plays no role at all.

Mr. KING. I didn't say no role. We find that there are instances where corners are cut in the maintenance areas, or in new equipment, or provision of whatever is necessary for safe operation, pressures on the pilots "to bust minimums", what have you. The attitude is that the revenue flights must go through, otherwise we're going to lose money.

Mr. GOLDWATER. Well, very bluntly, do you think that the FAA is pursuing a course of overregulation at this point in time?

Mr. KING. I really don't know all of their regulations. I just deal in a very, very small area, and what I suggested earlier was that their regulations by most of the operators that we've talked to, most of them being what would be considered outstanding in the field, view their regulations as minimal. They are the floor, not the ceiling.

Mr. GOLDWATER. One last question. There are many different statistical measures being used these days to characterize safety, such as fatal accidents per year, fatalities per year, fatalities per 100,000 flight hours, fatalities per 100,000 passenger miles, fatalities per 100,000 departures, and so on. I wonder if you could shed some light on this complex subject? Which measures are the most valid?

Mr. KING. What I try do to, as I suggested earlier, is to take the most conservative figures, based on 100,000 departures. Statistics can be misleading, of course.

Let me take an example. The air carriers might say:

> One-third of all the things that are rated as accidents against us the commuters never face. That's clear air turbulence because we fly at altitudes * * *. You know, so, that distorts our statistical picture, you're being unfair to us, you're giving the commuters a 30-percent break.

What I felt was, the comparison would be, is can the system be safer? By making the comparison on departures, we really come down to the basic area of the takeoff and the landing, which is the critical regime as far as we're concerned at this time, and we felt that is the fairest.

Mr. GOLDBERG. Per passenger mile, then all of a sudden the commuter business looks quite a bit different.

Mr. KING. Yes, you're right.

Mr. GOLDWATER. It's just very confusing, because they throw these terms around. It's almost like measurements of noise. You're not really sure which is the most valid so that everybody is talking the same common language. I didn't know whether you share that anxiety or not, whether you're comfortable with all these variety of measurements.

Mr. KING. What we tried to do is to select a set of statistics that the industry felt was fair, was the set that they said would most accurately reflect their operation. We try to work with them.

Mr. MINETA. Mr. Goldwater, we've already had the second bell so what I'd like to do is go ahead and recess the hearing for the time being, and come back; and if there are no followup questions hear from Mr. Hendricks on some specific accident case histories that we might be able to then get into the area of safety problems.

We'll reconvene in about 10 minutes.

[A short recess was taken.]

Mr. HENDRICKS. As Chairman King has outlined in his statement, the primary safety issues affecting the commuter industry have not changed appreciably since 1972. These issues center on the operational and maintenance programs of the carriers, and the pilot training programs. The commom trend affecting all the issues, and which has a great impact on how the attitude of aviation safety will be manifested in the commuter industry, is the surveillance and enforcement program of the Federal Aviation Administration.

Since 1975, the Safety Board has investigated about 238 commuter accidents, of which 58 were fatal accidents. However, the numbers of total accidents and total fatal accidents have been rising each year. More disturbing than just the increase in numbers were the nature of the accidents and the reoccuring deficiencies we discovered. The causes and factors of these accidents frequently resulted, as Chairman King related, from institutional deficiencies—maintenance, operational, and training program deficiencies or from violations of regulations and procedures.

One of the first commuter accidents which contained many of the safety deficiencies I have just referenced occurred in January 1974, when an Air East Beech 99 crashed at Johnstown, Pa. Our investigation subsequently revealed that the company management had instituted lower, unauthorized approach minimums, that pilot training records and maintenance records had been falsified, and that severe management pressure was exerted on company pilots to fly overgrossed aircraft. For example, maintenance deficiencies on aircraft were not written in the aircraft logbook for fear of grounding the aircraft. Instead, the pilot would note the deficiency on a piece of paper and give it to a mechanic who would hold the papers until the aircraft was in for maintenance. As a result, the aircraft always appeared airworthy. The Safety Board's investigation also revealed that the FAA surveillance of the carrier was inadequate, and that a special FAA inspection team, which inspected the carrier shortly before the accident, failed to discover any of the deficiencies or regulatory violations revealed by the Board's investigation. As a result of the findings of the accident investigation the FAA suspended the certificate of the carrier.

In September 1977, an Alaska Aeronautical Industries Twin Otter crashed, killing 13 people. The aircraft was off course and flew into a mountain. This airline, which was in the top 20 commuter airlines based on passengers carried, had virtually all operational control vested in the president and his wife. For example, the wife of the president, although she had no aeronautical qualifications or official position in the flight operations control of the company, had the accident aircraft dispatched on the trip. This aircraft did not have the required navigational radios, and its utilization on that trip was in violation of the regulations. We also discovered that there was virtually no operational control of the the company, and the training program was weak. The accident investigation further pointed to instances where pilots had been fired for refusing to fly, and had been pressured to fly unsafe aircraft on trips when the weather conditions were unsafe or marginal.

Alaska Aeronautical Industries had no hangar facilities, so mo
of the maintenance was done outside, and as is customary in th
airline industry, at night. We discovered that there were no ad
quate maintenance records or aircraft parts accountability. Man
of the company's replacement parts were kept on shelves and i
bins without proper tags. As a result, it was impossible to te
serviceable from unserviceable parts since they were mixe
together.

Our investigation indicated that FAA surveillance of the carri
was inadequate. This was due in part to the fact that the princip
operations inspector was responsible for 52 other commuter and a
taxi operators, some located 400 miles from the inspector's hea
quarters. This same inspector as recently as December 1979, wa
still responsible for 4 commuter operators, and 48 air ta
operators.

As a result of this accident, the Safety Board recommended tha
the FAA revise surveillance requirements of commuter airlines
provide more stringent monitoring, to insure that sufficient ma
power levels exist at FAA offices to provide adequate surveillanc
to review company manuals to insure proper procedures are fo
lowed, and to place more emphasis on the management qualific
tions of airline managers.

In September, 1978, an Antilles Airboats Grumman G21A exper
enced an engine failure in flight and crashed near St. Thoma
Virgin Islands. Four persons died in that accident. Our investig
tion revealed that the engine which had failed had been purchase
from an aircraft parts dealer in California, who in turn had pu
chased it from a company in France. All the records of the engi
were written in French. The parts dealer and an FAA inspect
who had knowledge of the engine records stated that the engin
were to be overhauled or used as core engines since it could not
determined from the records if the required service bulletins
airworthiness directives had been applied. These persons al
stated that they believed the engine was beyond its authoriz
overhaul time anyway. However, after a brief inspection, th
engine was placed on the accident aircraft. In addition, the prop
ler on the other engine was improperly maintained which result
in a significant reduction in the efficiency of that propeller.

The aircraft log books appeared to be satisfactory. However, o
investigation revealed that they had been falsified with the know
edge and consent of the president of the airline, and with th
knowledge of many company employees. In this case, when th
aircraft was due for an inspection, the president stopped maki
entries on the aircraft log which in effect indicated the aircraft w
not flying. At the time of the accident, the aircraft was at least
hours past a scheduled major inspection.

We discovered that despite an extensive and well-document
record of alleged company violations of Federal regulations, virt
ally no effective enforcement measures were implemented by FA
officials at the FSDO or regional levels. Recurring violations we
not vigorously addressed, and the resulting civil penalties we
compromised to the point where the enforcement program did n
present a deterrent to further regulatory violations. Finally, aft
the accident in question the FAA levied a $100,000 civil penalty

the company for regulatory violations discovered during the accident investigation, and other violations which were pending. However, even this $100,000 penalty was compromised to where only $10,000 was required to be paid.

As a result of this accident investigation, the Safety Board recommended that the FAA provide adequate staffing for FAA facilities charged with surveillance and enforcement of Part 135 operators; assure uniform application of surveillance and enforcement procedures, and upgrade enforcement procedures and actions in order to provide a viable deterrent to further violations.

In March, 1979, a Universal Airways Beech 70 Excaliber crashed on takeoff in Gulfport, Miss., killing all eight persons on board. In this accident the primary safety deficiencies were in the training and maintenance areas. The pilot who had completed the training program only 3 days prior to the accident had less than 20 hours in the model aircraft, and had less the 140 hours of reciprocating multiengine flight experience. There was no copilot, nor was one required. The company did not have any training records on the pilot except for a record which the training pilot reconstructed from his notes after the accident had occurred.

Our investigation revealed that an electrical wire had been installed to bypass the starter interrupt safety mechanism. The starter interrupt mechanism would have prevented the left engine from starting if the nose baggage door was unlocked. In the accident, the nose baggage door had been left unlocked by the company station agent and not detected by the pilot. During the takeoff, the door opened, was struck by the left propeller, and the accident sequence was initiated.

The disabling of a starter interrupt switch and the subsequent opening of a nose baggage door had previously occurred in 1972, and resulted in the crash of another commuter flight. The Safety Board had made two safety recommendations to the FAA on this subject in July 1972. However, neither recommendation was resolved in a manner which was acceptable to the Safety Board.

A significant point regarding the maintenance program was that although the company operated five aircraft, they only employed three or four mechanics. This was not necessarily a problem if the maintenance programs was managed properly. However, the director of maintenance who was 23 years old, was newly appointed, and had less than 3 years total experience in aircraft maintenance. In addition, he stated that he devoted less than 50 percent of his time to managing the maintenance program, with the remainder spent as a line mechanic, a baggage loader, or in reservations.

There were three other significant fatal takeoff accidents in 1979 which included Swift Airlines at Los Angeles, Calif.; Prinair at St. Croix, Virgin Islands; and Commair at Covington, Ky.

Although there are several other investigations which could illustrate safety deficiencies similar to the ones that I have mentioned, these cases that I have referenced highlight the accident trends we have noted. Overall the types of accidents experienced by the commuter airlines have not changed appreciably since 1972, just as the safety deficiencies have not changed.

Thank you, Mr. Chairman.

Mr. MINETA. Thank you, Mr. Hendricks.

Now, regarding the Johnstown accident, you list several safety problems which were apparently routine procedure for that operator: One, management had instituted unauthorized minimums; two, pilot training records and maintenance records were falsified; and three, management pressured pilots to fly overgrossed aircraft. Yet, you also state that a special FAA inspection team inspected the carrier shortly before the accident and failed to discover these problems.

What should FAA inspectors have done to uncover the problem, and what extra effort would it have taken?

Mr. HENDRICKS. I think a constant surveillance program that would have included surveillance at times when these operations were being conducted; and whether at Johnstown a more adequate and regularly conducted surveillance program would have perhaps uncovered many of the deficiencies that we found before this accident occurred.

Mr. MINETA. Looking at this Johnstown accident and the Antilles Air Boat accident, you seem to have a case where management has had a deliberate and routine policy of keeping inaccurate records. This seems to raise the fundamental question of exactly what the purpose of FAA inspections should be. Is it to check the records and make sure that everything is OK on paper, or is it to check behind the paper to see what is really done in practice? What should our inspection approach be, and what is it now, since these are what seem to be examples of intentional disregard of the regulations?

Mr. HENDRICKS. I think it's a combination of both of those areas that you mention. There has to be good record keeping in any organization, and I think the sign of a good company is manifested in proper record keeping, and in keeping track of all of the things that have to be kept track of; pilot times, maintenance times, aircraft availability; plus the fact——

Mr. MINETA. How do you check behind the records if they're falsified, or if they're deliberately being frauded?

Mr. HENDRICKS. I think it's a difficult thing to do, but we've had testimony in various accident investigations; Downeast Airlines, for one; and I believe in the Johnstown one where we've had pilots come forth after the accident and indicate that they have had different contacts with FAA inspectors; Prinair was another example of it, where the earmarks of an impending accident are being presented. Perhaps violations aren't apparent at this particular time, but certainly all of the signs leading to a nonconforming type of an operation are present. I think it—and this is a view that would have to be resolved at different levels, that the surveillance has to be done during the off hours, as somebody in the committee mentioned before; that the surveillance just cannot be between the hours of 8 and 5 at night. It has to be a more comprehensive type of surveillance, not particularly oriented toward violations.

Mr. MINETA. Are these only found in certain situations whether they be by company, by maybe financial condition, or by Federal region? Is there any kind of a pattern even to the FAA surveillance inspection aspect of it?

Mr. HENDRICKS. I think as the chairman mentioned before, that the types of surveillance and adequate surveillance have been

found in various regions; the Carribean, the Northeast, in many places where we have had these accidents we've discovered various degrees of surveillance. I don't think that there's any pattern that we have found that would indicate that one region is worse, or better than the other.

Mr. MINETA. Going to the Antilles Airboat accident, the Safety Board report on this accident indicates that at the time of this accident there was no designated director of maintenance, even though the company had three maintenance facilities.

Is this unusual, and do most commuter operators that you've reviewed or discussed this subject with, have an individual who is responsible for maintenance? What does the FAA require of a commuter air carrier in this regard?

Mr. FERGUSON. At the time of the air boat accident, there were no FAR requirements for a director of maintenance. The new 135 requires qualified managerial personnel. They require a director of operations, a director of maintenance, a chief pilot and so forth, and they do have the qualifications set forth for a director of maintenance. He must know the maintenance sections of the certificate holder's manual, the operations specifications, the provisions of this part and other applicable regulations necessary for the proper performance of his duties; and hold a mechanic's certificate with both airframe and powerplant ratings; and have at least 3 years of maintenance experience as a certificated mechanic on aircraft, including at the time of appointment as director of maintenance the recent experience requirements of part 65.83—that's a rule detailing recent experience requirements in the same category and class of aircraft as used by the certificate holder; or at least 3 years experience with a certificated airframe repair station, including 1 year in the capacity of approving aircraft for return to service. That's in the new part 135.

Mr. MINETA. Now, those went into effect in December of 1978, is that correct?

Mr. FERGUSON. December 1, 1978.

Mr. MINETA. For all commuters to have been in compliance on December 1, 1979?

Mr. FERGUSON. Yes; they did give them a time to comply.

Mr. MINETA. Now, the Safety Board report also points out that FAA regulations would be disregarded at times in order to meet scheduling requirements, and that this was done with the knowlege of company officials.

Isn't this something that the FAA should have determined through review of routine maintenance records, and was the FAA aware of these incidents prior to the time of the accident?

Mr. THOMAS. In that regard, sir, the records were falsified, and the testimony by Antilles personnel said that it would have been very difficult simply by a records inspection for the FAA personnel to know that the airplane had been flying when in fact the log books said they weren't. These logs and other logs had been presented to the FAA as true copies in the past and never been questioned.

It gets to not whether a single inspection will do it. The only way to really conduct an adequate surveillance program is to have a constant program. Our witnesses at the hearing said that if an

FAA person spent a week on and a week off, as a frame of reference of time, he would know very well whether the work is being done. He would know by looking at the manuals which specify the maintenance procedures if in fact the maintenance was being performed as they say it is. He can watch maintenance being performed one day, and next week pull a check on the airplane and see if the airplanes were being done; so simply by a single inspection once a month or twice a month at a base, which was the pattern at Antilles, they're not going to find out those errors. They're going to have to perform constant inspections, and keep up with the programs.

Mr. KING. This is also an example of an airline that was in fairly decent shape from a financial point of view. If you look at her—it wasn't in any kinds of problems. It maintained a strange kind of cash flow, but that was a management philosophy.

Mr. MINETA. Do they still hold their certificate?

Mr. KING. They sold, I believe, to Resorts International and the same management team is down there. They're still operating.

Mr. MINETA. This is the same Resorts International up in New Jersey?

Mr. KING. Yes. That's as I understand, sir.

Mr. MINETA. Once again we note the real gamblers, then.

Mr. KING. Well, the other thing was, here's a pilot who was flying it who had over 40,000 hours; and there was some basic things about the aircraft he didn't know. He thought he could, for example, fly it on ground effect when in fact he was going into the water; but he assumed it would recover.

Mr. MINETA. Once again we note from your statement that your recommendations to the FAA were to provide adequate staffing for surveillance and enforcement; that there be uniform application of surveillance and enforcement procedures, and that these be upgraded to provide a viable deterrent to further violation.

Has the Board taken another look at this particular situation to determine if these recommendations have been adopted?

Mr. HENDRICKS. The same district office that was charged with the surveillance of Antilles was also involved with our latest accident down in that area, Prinair; and I believe from the testimony that we received during this investigation, some of the same situation or circumstances still exist. A lack of adequate surveillance was indicated in the Prinair investigation; and as best we could determine, it was because of—or partially because of inadequate staffing.

Mr. MINETA. We have a call of the House for a quorum call plus a vote, so the subcommittee will stand in recess for 15 minutes.

[A short recess was taken.]

Mr. MINETA. Mr. Hendricks, going to the Johnstown crash, what did the FAA special investigation team look into when they inspected the carrier prior to the accident; and do you know why there was a special investigation conducted at that time?

Mr. HENDRICKS. I believe that was a SWAP inspection, which was a routine type of inspection that they had conducted back in those years; which they would go through all aspects of the company operation and maintenance procedures.

Mr. MINETA. Does the FAA still have the SWAP team?

Mr. HENDRICKS. They don't have SWAP teams per se. I believe it's under a—they have a similar type of inspection now, another achronym. It's under a different name.

Mr. MINETA. When they had that SWAP team, at least at that time in this special investigation, was that a routine special investigation or was that in response to some complaints that had been registered about the operation?

Mr. HENDRICKS. I believe these were more or less routine inspections. Within a number of various regions they had a number of these SWAP teams set up to go out on a scheduled basis prior to any complaints so to speak. They would go out on a scheduled basis and conduct these inspections with specialists in the various areas, maintenance and operations and so forth.

Mr. MINETA. And in that instance, how long after the investigation was it before the FAA suspended the carrier's certificate?

Mr. HENDRICKS. As I recall, the carrier's certificate was not suspended until after our investigation; and I don't have the dates at hand. Maybe Mr. Thomas does.

Mr. THOMAS. Mr. Chairman, there were two of them. There was a maintenance inspection in May 1973, and an operations inspection in November 1973, with the accident occurring in January, 1974.

Mr. MINETA. Now, did that carrier get back its certificate?

Mr. THOMAS. No, sir, it didn't.

Mr. MINETA. So to this day it's not flying?

Mr. THOMAS. To the best of our knowledge.

Mr. KING. Mr. Chairman, there is one observation I'd like to make. Sometimes the corporation name changes, but the people don't. I found it rather interesting when we were receiving testimony in Universal Air that the gentleman who headed up that listed in his background a substantial list of commuter operations he had been involved with that had gone out of business, shall we say. So that although corporations may come and go, the personalities who stay in stay for a long time; and sometimes it's worthy of note from the FAA, where did that staff come from; because one is not born full blown as a chief mechanic or something else in operations. One of these operations at age 32, or 37 or 46, had a history before they——

Mr. MINETA. Have you ever followed that by individual?

Mr. KING. No, Mr. Chairman, because what we have done is stay within the accident itself. I merely raise it because many times, as we know, the corporate name changes, but the people all remain the same.

Mr. MINETA. And who would generally check on that, CAB or FAA?

Mr. KING. FAA is the responsible party that would be looking, so that when you're looking to see what someone's background is to make a judgment as to another qualifications and capability——

Mr. MINETA. Do FAA and CAB share this responsibility?

Mr. KING. FAA really handles the whole safety thing. CAB admits that they will go out and look at the economic aspects, but they're looking at them from a different point. Their perspective as we understood it was, "Are you really capable of providing this community with service?" They left to the FAA all the judgment

questions on safety. They really don't have an independent safety evaluation operation. If they see a corporation in trouble, they will just a matter of course alert FAA that this place seems to have some problems with its cash flow, whatever.

Mr. MINETA. Let's look over a period of time. Mr. A is ABC Airlines at one time. The certificate is yanked. He comes back as XYZ, and then it's yanked; and then later on, he comes back as MNO.

Mr. KING. We don't know where some of these people go. That's what I'm saying. But I found—I was struck by the number of witnesses who have indicated they've been associated with this one, this one and this one. I don't know the particular background. But FAA has the ability to run that right through because they have a computerized list in Oklahoma City of everyone holding one of their certificate holders, and they can run a cross check anytime they want. I mean, it is not a—I don't want to suggest it's a complex process, but it might be worthy of note at sometime, Mr. Chairman.

Mr. MINETA. How about the Prinair accident?

Did your investigation look into the history of FAA enforcement action against Prinair?

Mr. HENDRICKS. Yes, sir, we did.

Mr. MINETA. Did you find that any action such as fines were ever levied against this carrier?

Mr. HENDRICKS. A number of violations were processed against this carrier at various times during the history that we examined. There were some indications that there were some fines that were paid, and many more indications that a number of fines had been compromised at various—at higher levels in the FAA. The violation had been processed so that it did away with the fine.

Mr. MINETA. In the kind of a system we have right now, who makes the initial violation? Is it the inspector?

Mr. HENDRICKS. The inspector would file the initial violation.

Mr. MINETA. Who then determines how much the fine will be?

Mr. HENDRICKS. I believe this is processed at the region level, and the determination of the amount of the fine is set at that level.

Mr. THOMAS. With the exception that the individual inspector, or the GADO office, recommends the civil penalty, and then it's acted upon at the regional level.

Mr. MINETA. And when you say "acted upon," is that also at the regional level where it is compromised down?

Mr. THOMAS. That's where it is turned over to the Regional Counsel for subsequent settlement; and then the individual inspector at the GADO will eventually find out what happened.

Mr. MINETA. So any reduction or any further agreement relative to that action would be at the regional office?

Mr. KING. That's correct.

Mr. MINETA. Have you ever checked those records to follow through as to the violations, as to the civil penalties imposed, and then determine what finally occurs?

Mr. KING. Candidly, Mr. Chairman, we don't operate with any question of liability or anything else. We're a nonadversary operation. We strictly go for the accident itself.

Mr. MINETA. Did you find any similarities between this accident and the Antilles air boat accident a year earlier, since both of these carriers are supervised by the same flight standards office?

Mr. HENDRICKS. Not really. The two accidents were quite different. The Prinair accident was basically a weight and balance type of operation, wherein basically the ground handling personnel, and the training of the ground handling personnel for the baggage and so forth, didn't do their job. The Antilles accident was more of a blatant falsification of records and utilization of an engine on an airplane that shouldn't have been there. From that aspect there was no similiarities between the two accidents. The degree of surveillance was the similar point. We feel that in both accidents, proper surveillance would have detected possibly the accidents before they occurred.

Mr. MINETA. When you say "proper surveillance", is that because of the inadequate number of inspectors, or that the workloads were too heavy, or the inspectors were not qualified to perform the work assigned to them, or what—have you conducted any study of the FSDO in that instance?

Mr. HENDRICKS. It didn't appear that there was any lack of qualifications of the inspectors that were assigned to these carriers. In fact they appeared to be heavily qualified for the jobs they were doing. It did appear that they were spread a little thin with all of the activities that they had to surveil in that area.

Mr. THOMAS. The point here is, sir, that Prinair is the largest commuter in the United States; and Antilles was certainly, at the time of their accident, in the top 15; and both of these airlines are coming out of one operation, out of one FAA office; and you would think that this would certainly tax the workload of the individual inspectors almost to the point where perhaps they should have people devoted only to those airlines; but we didn't find that was the case. They still had their general aviation activities.

Mr. MINETA. And between Prinair and Antilles, how many aircraft were they operating?

Mr. THOMAS. Approximately 40.

Mr. MINETA. Plus how many other general aviation in that district office?

Mr. THOMAS. The total number of aircraft that the San Juan FSDO is responsible for is 768. Of this number, 559 are registered in Puerto Rico.

Mr. MINETA. I notice that in the Safety Board news release which was dated February 21, 1980, that the Board commented about confusion at the accident scene because airport fireman failed to take positive control. Our staff has also commented on this point noting among other points that of the number of firemen assigned to duty at any one time, some have duties such as collecting landing fees, and checking the ramp area near the terminal, that removes them physically from the firehouse. As a matter of fact, did not your inquiry reveal the same weaknesses, and isn't this something that FAA should be devoting much more attention to since this airport is serviced daily by 727 and 707 jet flights which carry considerably more passengers than the Prinair Aircraft?

Mr. KING. I think our concern, Mr. Chairman, was that there were firefighters on the scene. Their response, though, could I say, was less than what we viewed as professional.

For example, the plane in question came down almost directly in front of their garage; and instead of moving out with their fire equipment and donning their turnout gear, which is the standard procedure for any trained firefighter going to what could be a serious incident—they could see it; they in turn just reacted and ran down to the site. So that the small fire that caught was extinguished by someone from another airline; that they never did foam down the area in spite of the fact that there was leaking fuel that was highly volatile. So that the kinds of response that we would give to a professional firefighting operation would be in sharp contrast with what we saw here. And yet, the training records as reflected indicated that there was more than adequate training in all phases there. So one can either assume that in fact the training didn't occur, which we prefer not to think, or that the training was totally ineffective; because when it came to the crunch, it plain wasn't there in a professional manner. And we agree with you on what the response should be in all the incidences including the areas of substantial exposure to more citizens.

Mr. MINETA. What about the St. Thomas crash of a couple of years ago with American Airlines? Would you say that that was also the case with fire and rescue teams at that time?

Mr. THOMAS. Almost identical. They did respond immediately, but as far as bringing their equipment——

Mr. MINETA. Did the Board make a recommendation at that time?

Mr. THOMAS. Yes, sir, we made several recommendations.

Mr. MINETA. And in that case is the Virgin Islands Port Authority the agency to whom you made those recommendations?

Mr. THOMAS. No, sir, we made the recommendations to the FAA who is the certificating agency, who enforces the requirements of part 139 that specifies what the port authority must do.

Mr. KING. By the way, Mr. Chairman, there was one observation which I thought was rather interesting. The 3-minute requirement to the plane was suggested on the airport configuration that you have in many places. Comment was made almost with a smile that if your truck will start, you'll get there.

Mr. MINETA. If the truck——

Mr. KING. If the truck will start, you can get there. It isn't really a test of turnout time. That in the real time frame in the real world, in the airports they were talking about in this area, they said that the 3 minutes was really an excessive amount. It wasn't really a test of speed, dexterity, or ability to respond.

Mr. MINETA. In the course of your investigation, did you determine that there was an attempt on the part of the pilots of the company to bring this problem relative to weight and balance manifests on the Prinair aircraft to the attention of the company?

Mr. HENDRICKS. There were a number of attempts by the pilots to bring this weight and balance problems which had been going on since a couple of years before this accident occurred. In fact, after the incident at Beef Island, this was brought to the attention of the FAA. There was a documented record of weight and balance pro-

lems sent to the district office by the pilots association; so the answer is yes, they attempted in many ways to bring this problem to the attention of both company mangement and to the FAA.

Mr. KING. Could I ask, Mr. Hendricks, could you describe just for the record the Beef Island so that it will be reflected——

Mr. MINETA. That's the accident where they said for the kids to come on up front?

Mr. HENDRICKS. That's correct.

Mr. MINETA. You say that the pilots also complained to the FAA besides company management?

Mr. HENDRICKS. This problem was brought to the attention—I forget the exact details. It was brought to the attention of the then principal inspector, and he attempted to resolve it with the company. He went over and visited with the manager of Prinair and discussed these weight and balance problems, at which time it was supposed to be resolved.

Mr. MINETA. Do you know what the response of either Prinair or the FAA was with regard to these complaints by the pilots?

Mr. HENDRICKS. No; the testimony we received at the hearing was that after one of these complaints would be registered with the company, that for a short time after that the procedures would tighten up, then the weight and balance problems would disappear for a while; and then after the pressure was taken off, the same problems would recur again.

Mr. MINETA. Was the FAA doing any surveillance work?

Mr. HENDRICKS. This was during the time that the surveillance would increase and there would be inquiries made as to the weight and balance procedures. They would attempt to retrain some of the people, primarily at San Juan, I believe; and the problems would, as I said, go away for awhile.

Mr. MINETA. Did you also discover that the same flight which was involved in the July 1979 accident at St. Croix had been the subject of similar complaints prior to that accident?

Mr. HENDRICKS. That's correct. This was the flight that would go down island, I think is the way they refer to it. The problem was, the training of the baggage handlers on the down island segments of this flight, that it was routinely a heavily loaded flight with a lot of baggage, and this was one of the concerns of the pilots of Prinair during this time. It would be routinely a heavy flight out of San Juan, out of St. Kits, and so forth.

Mr. MINETA. Mr. Fary, do you have any questions?

[Mr. Fary indicates in the negative.]

Mr. MINETA. What about accidents which you've investigated in, let's say, the past year that were weather related? What percentage of all accidents would you say would fall in this category?

Mr. HENDRICKS. Is this just the commuter accidents, or——

Mr. MINETA. Right.

Mr. THOMAS. In the period 1975 to 1978, 29 percent of the commuter accidents were weather involved, sir.

Mr. MINETA. Now, we've heard that in Alaska, specifically, that weather reporting is worse today than it was 30 years ago. Do you have any comment on that observation made to us?

Mr. THOMAS. I don't have any basis right now to make any judgment, sir.

Mr. MINETA. In what percentage of the commuter airports that you have visited is adequate crash and rescue equipment available?

Mr. THOMAS. The thing I remember here is that, first off, by law, if it's not a certificated airport under part 139, they don't have to have crash fire rescue. So, I have to assume that if there is a—if it is certificated that the crash fire rescue services are adequate. However, 41 percent, or 148 airports which are served exclusively by commuters don't have crash fire rescue services.

Mr. KING. By requirement.

Mr. THOMAS. By requirement.

Mr. MINETA. I'm sorry. Would you go over that again?

Mr. THOMAS. Of the 148 airports served exclusively by commuters, which are not certificated—that's 41 percent of the total number of airports served exclusively by commuters, they don't have crash fire rescue services. They're not required to, either.

Mr. MINETA. Have you ever made a recommendation on certification of commuter airports?

Mr. THOMAS. The Safety Board has not made recommendations—let me go back. It's been a topic that has been discussed, and I would have to check to see if we specifically had made a recommendation or we had made recommendations about training of airport personnel. I would have to check that in the records, sir.

Mr. MINETA. So those airports that are certificated are required to have crash and rescue, but you're also maybe indicating that the level of training for those personnel is inadequate?

Mr. THOMAS. In some cases, sir.

Mr. MINETA. Have you noticed any improvement in commuter operations as a result of the new FAR 135 regulations?

Mr. KING. There are a couple of things that struck us, that a lot of the accidents that we saw, wouldn't have made any difference. It's a question of surveillance and management. The new 135 enhances the area of safety, but in an awful lot of the accidents that we've seen, if the new 135 had been in effect it wouldn't have made a bit of difference. Certainly, the new part 135, as I say, enhances safety. I don't want to denigrate that for a moment; but I would like to stress that without that strong surveillance component, we have additional words on pieces of paper, but I'm not sure that we're delivering the product to the public, which is safety.

Mr. MINETA. Going very briefly to the Gulfport accident, other two FAA inspectors; one operations and one maintenance assigned to perform surveillance of this airline, it's noticed that they also were assigned many of the other 70 air taxi operations and another commuter airline. It was pointed out by other FAA personnel that proper surveillance of two commuter airlines would require full-time attention of one inspector.

Do your findings seem to bear this out?

Mr. THOMAS. In many cases, and it's an increasingly growing number, the answer is yes. More and more so, we find that the FAA inspectors should have primary workload of the surveillance of the certificate.

Mr. KING. Mr. Chairman, I believe in this instant case, the testimony was given by the FAA inspectors in which they said they were overextended. They were under oath, when asked directly,

they said that they were doing their best, but their best wasn't good enough because of time.

Mr. MINETA. This accident seems to repeat the example of an FAA operations and maintenance inspector having too many operators assigned than he could possibly surveil.

In this case, each inspector had 35 to 37 companies as well as other GADO duties. Do you consider that this confronts them with an impossible task?

Mr. THOMAS. It's hard to say what is a correct number, and what's not a correct number. If you say 35 to 37 certificates, plus all of the other general aviation duties, such as surveillance of flight schools, and certification of mechanics, then certainly 35 to 37 is too much. The number should be much, much smaller.

Mr. MINETA. And as I recall, I think you testified there was some information in this case, that the director of maintenance spent less than half of his time functioning in that capacity, and the director of operations, chief pilot and training pilot were also line pilots.

Now, what about the new FAR 135 regulations? Do they address themselves to this problem?

Mr. FERGUSON. Could you repeat that question for me?

Mr. MINETA. Right. As I recall, in this incident, in the instance of the company involved in the Gulfport accident, the director of maintenance had spent less than half of his time functioning in that capacity; and also the director of operations, chief pilot and training pilot, were also line pilots. I'm wondering, does the new FAR 135 address these issues?

Mr. FERGUSON. No; it doesn't. It addresses the qualifications of the men. It does not say how long he will spend at the job. And in certain small operations, a man can double up.

Mr. MINETA. You can have a person who is a director of maintenance, and also let's say, director of operations; and as long as they meet the 3-year minimum requirement for director of maintenance, and whatever other requirement for director of operations, that person could be wearing both hats?

Mr. FERGUSON. As I understand the regulations, yes, sir.

Mr. MINETA. Have you made any recommendations relative to that portion of the regulations?

Mr. THOMAS. Yes, sir, we have. This goes back, again, to 1972. We've made them right up the line. The nature of the recommendation is that the responsibilities and duties of the individual corporate managers be spelled out.

Now, if it says that a man is director of operations, and he has these duties, it's expected that he does these duties; and this is where a subjective determination comes in. If the FAA finds that the man is director of operations, and chief pilot, and the training pilot, and he spends a portion of his time flying the line, obviously someplace it's suffering; so whereas the regulation does specify duties, someone has to make sure that the spirit as well as the letter of the law is being adhered to.

Mr. MINETA. Well, Mr. King, Mr. Thomas, Mr. Hendricks, and Mr. Ferguson, I want to thank you very, very much—if there are no further questions from counsel—for your patience during these long hearings. But I feel very good, frankly, about setting a founda-

tion for this subcommittee for the hearings that will continue in the next several days; and I would like to thank you very, very much for helping enlighten our subcommittee relative to this whole issue on commuter aviation safety.

Your work, of course, and the work of your Board and staff is very, very important to that confidence level that you spoke to, whether a person is flying in commuter aviation, or on a trunk carrier; and so we respect very much the work that you do, and I do want to thank you for your efforts.

Mr. KING. Thank you, Mr. Chairman.

Mr. MINETA. The hearings will stand in recess until tomorrow morning at 10 a.m. in room 2253, when we will have a panel of commuter operators.

[Whereupon, at 2:05 p.m. the subcommittee recessed to reconvene at 10 a.m. Wednesday, February 27, 1980.]

COMMUTER AIR SAFETY

WEDNESDAY, FEBRUARY 27, 1980

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON OVERSIGHT AND REVIEW,
COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10:35 a.m., in room 2253, Rayburn House Office Building, Hon. Norman Y. Mineta (chairman of the subcommittee) presiding.

Mr. MINETA. The subcommittee will please be in order.

This morning, we resume our hearings on the subject of commuter airline safety. We have a panel of executives representing commuter airline operators, who have come to share with us their experiences related to operations, maintenance, safety performance of the aircraft, and their appraisal of the performance of the Federal Aviation Administration in the supervision of this very rapidly expanding industry. So we do welcome your appearance this morning.

Gentlemen, those of you who will be testifying, if you will rise and be sworn at this time.

Do you solemnly swear that the testimony you will give before this subcommittee will be the truth, the whole truth, and nothing but the truth, so help you, God?

[Affirmative response from Messrs. Adcock, Connell, Crabtree, Ferrucci, and Howe.]

Mr. MINETA. Thank you very much.

Mr. Goldwater, do you have a statement at this time?

Mr. GOLDWATER. Thank you, Norm.

As I prepared for these hearings this morning, it seemed like every article I read spoke of new proposed rules for the operation of the commuter business. I finally began taking notes because I could not remember them all. I put together these notes in the form of a list which I have distributed to the witnesses this morning, and also to my colleagues.

Of course, one of the main purposes of regulations is to shape up or weed out the so-called bad apple operators without placing an undue burden on the good operators. As the accident rate goes up, there is a natural tendency for the regulators to issue more regulations.

But as we heard yesterday, the bad apples do not follow the regulations anyway. They falsify logbooks and maintenance records, bust minimums, cut corners, and so on.

So the increased regulations only serve to hurt the conscientious operators, who are operating safely in the first place. Perhaps what

we need is fewer new regulations and better enforcement of the ones we already have.

With that in mind, Mr. Chairman, I would like our witnesses, if they have a chance to, to look over this list of regulations that our records were able to compile, and perhaps give the subcommittee their comments on the various proposed rules and regulations, either in their statements or during the question period later.

Basically, I am interested in your opinions on which rules are necessary and which are not. Is the Federal Government doing things for you or doing things against you? And how could the Government really do a better job to assist you in your work?

Thank you, Mr. Chairman.

Mr. MINETA. Thank you very much, Mr. Goldwater.

It looks like, with the binders in front of Mr. Howe and Mr. Ferrucci, that they probably have a list of some of the regulations right there that they would like to speak to.

We are pleased to have the panel here today, and gentlemen, if you would go ahead and proceed in your own fashion.

TESTIMONY OF A PANEL, CONSISTING OF: STUART E. ADCOCK, PRESIDENT, TENNESSEE AIRWAYS, INC., ALCOA, TENN.; HERSCHEL G. CONNELL, EXECUTIVE VICE PRESIDENT, COLGAN AIRWAYS CORP., MANASSAS, VA.; DENNIS CRABTREE, VICE PRESIDENT, OPERATIONS, GOLDEN WEST AIRLINES, NEWPORT BEACH, CALIF.; DAVID FERRUCCI, VICE PRESIDENT, OPERATIONS, RANSOME AIRLINES, BENSALEM, PA.; AND F. E. (PETE) HOWE, VICE PRESIDENT AND GENERAL MANAGER, RIO AIRWAYS, KILLEEN, TEX.

Mr. ADCOCK. I am Stuart Adcock.

We are very appreciative of the opportunity to appear before this committee and hope that we will be able to offer some meaningful input toward our mutual interests in improvement of commuter air carrier operations and regulations.

Tennessee Airways is an airline dedicated to local service, dedicated to the provision of safe, dependable air service for Tennessee and adjoining States. Serving Knoxville, Nashville, Chattanooga, Lexington, and Charlotte with 26 daily flights, we currently operate 3 Cessna 402B businessliners with armchair cabin seating for 6 passengers in air-conditioned comfort. Our aircraft are fully equipped for all-weather operations including radar, area navigation computers, and anti-icing equipment.

To further insure the maximum level of passenger comfort and safety, Tennessee Airways provides an extensive flight crew training program with a minimum of 35 hours ground training and 15 hours make and model flight training.

Minimum pilot experience level is 3,000 hours total time, 1,000 hours multiengine time. Actual average level is 6,000 total, 3,000 multi.

Strong community support for our concept of first class, personal service is reflected in our growth record—100 percent during each 6-month period since inception in July 1978.

Our initial route—Knoxville to Nashville—has both trunk and regional carrier service at peak hours, but the frequency and dependability of our scheduling has been well received and encour

aged our expansion to the current level of 10 daily flights in this market, while maintaining a 70-percent load factor.

This has been a primary indicator to these communities of the logistical benefits offered by commuter air service. With 10 daily flights we are offering 60 daily seats between Knoxville and Nashville, of which more than 70 percent are utilized.

If this same number of seats were offered by a trunk or regional carrier, there would only be one flight, and this would be of little benefit to either the operator or the traveler.

Cooperation and support by the FAA has been an essential element in the development of safe, efficient operations, reflected in a 98-percent on-time performance after 7,000 flights.

A recent, comprehensive, 1 week inspection of our operations and maintenance procedures by a team of four FAA inspectors from throughout the southern region reconfirmed our dedication to excellence and had no significant recommendations for improvement. Only five minor discrepancies were noted during the entire inspection.

We firmly support this comprehensive review concept and applaud the southern region for their leadership in this area.

Regarding an area of suggested improvement for the FAA, a lack of communication between the local, regional, and national levels of the FAA has presented us with several time-consuming projects to bring hastily issued bulletins, circulars, and regulations into aliment with reality. An adequate use of the resources available from the field—FAA offices and individual operators—before the issuance of bulletins, directives, regulations, and so forth, would greatly improve the efficiency of the regulatory process. Recent cases in point include minimum equipment lists, weight and balance control, and experience requirements for single-pilot IFR operations.

Addressing another area in which we would like to see some improvement, terminal facilities for commuter use were generally overlooked during expansion and master planning in the 1970's. Utilization of some of the $4.5 billion reserve in ADAP funds for improvements in this area would have some immediate benefits in industry efficiency and image.

Projection of a first-class image can be somewhat difficult, selling tickets underneath a stairwell and boarding passengers a quarter-mile from the terminal.

Last, but far from least, we have a growing concern about the source and cost of avgas and jet fuel for the commuter. In our incipient stages of growth, the commuter industry lacks the organization and the power to amass and distribute fuel supplies essential to the maintenance of air service for the small- and medium-size communities within our route structures.

A federally controlled allocation system based on demonstrated need would go a long way toward assuring the continued evolution and improvement of the Nation's air service as envisioned within the Airline Deregulation Act.

In general, we feel the commuter industry is willing and able to rise to the challenge of providing safe, efficient, comfortable air transportation for the small- and medium-size communities throughout our country. Acceptance of the challenge and responsi-

bility before us must be balanced by public support and open communication such as we are enjoying here is the key to our mutual success.

Thank you.

Mr. MINETA. Thank you very much, Mr. Adcock. For the record, let me introduce you. That was Mr. Stuart E. Adcock, president of Tennessee Airways Inc., Alcoa, Tenn.

Next, Mr. Herschel G. Connell, executive vice president, Colgan Airways Corp., Manassas, Va. Go right ahead, sir.

Mr. CONNELL. Thank you, sir.

We are both a fixed base operator, a flight school operator, and also a small conservative commuter airline operator. I say "small commuter" because we are currently operating two Beech 99 turboprop and one Piper Navajo Chieftain commuter aircraft, 10 flights a day between Dulles International Airport, Poughkeepsie, N.Y., Binghamton, N.Y., and Manassas, Va.

I say "conservative" because over the last 11 years, we have operated basically the same types of aircraft over the same routes, with the same management personnel and policies, along with the same dedication of effort to safety.

We have heretofore considered the FAA minimum standards to be just that—the minimum—and as such, we have always bettered them by utilizing captains with ATP ratings; we have always used full deice-equipped aircraft; we have always used radar-equipped aircraft; and our pilot experience level requirements have been among the highest in the commuter industry.

As a net result of our dedication to safety, we have carried some 131,495 passengers over 4,748,006 nautical miles, on 19,922 flights, without suffering one single commuter aircraft accident.

Mr. Chairman, to my knowledge, there are some 1,910 FAA-authored Federal aviation regulations, and who knows how many amendments and advisory circulars, in print today.

We at Colgan Airways are subject to at least 466 of these, of which some 160 pertain directly to our commuter operations. Based on these numbers alone, I would say that the FAA is doing a good job of regulating the commuter industry. I do know that they are making us dot the "i's" and cross the "t's" much more now than in the past.

I am not of the opinion that more regulations will make us more safe. As you can imagine, there is a lot more to safety than just regulations.

The FAA is also doing a creditable job in their base, ramp, and spot "shakedown" type of inspections, as well as their depleted inspection force permits.

We have been promised by the FAA Director of the eastern region that he is doing everything he can to obtain and train more inspectors for our region, hopefully to help us rather than to regulate us more.

The FAA, like many Federal agencies, is so inundated with paperwork that they cannot always be on top of all the critical operational events going on out in the field today.

For example, on February 9 of this year, the FAA representatives in Wichita, Kans., caused Beech Aircraft to issue a Beechcraft Safety Communique No. 200–52 in the initial form of a Telex, to a

operators of certain aircraft. This communique recommends that "prior to the next flight" a series of inspections be performed on the wing spar bolt fittings of these aircraft. If this "prior to the next flight" safety communique that was originated on February 9 was so important to safety, why was it mailed to us? Consequently, we did not receive it until February 12, some 72 hours later. Why did the FAA follow it up with an airworthiness directive that has been sent to every operator of this particular aircraft except us and our local FAA Flight Standards District Office who should have been notified so that they could have been on hand to oversee and help us perform the required inspections.

Fortunately for us, Beech Aircraft representatives called us on the phone the evening of the 8th, told us the communique would be sent on the 9th, and gave us the details of the inspections required. We grounded the aircraft in question on our own and performed the inspections long before the mail arrived.

Had we not had this phone call from Beech Aircraft, we could well have subjected the flying public to an aircraft that had a suspected deficiency on at least 12 flights unknowingly.

When I left my office last night, some 17 days after the communique was originated in Wichita, our company still had not received that AD from the FAA, nor had our local FISDO contacted us about it. So I am assuming that they have not received it either.

It seems to me that a suspected deficiency in an aircraft which could have affected the lives of many people should have enough priority attached to it all the way down the line that there would be no possible way for it to fall through the crack, unnoticed.

This is one case when the FAA's attention to dotting the "i's" and crossing the "t's", rather than real life things, does not contribute to increased safety.

There is one particular area of safety in which I personally feel that some improvements can and should be made. That is in the area of commuter aircraft accident prevention, in which I feel that the FAA is severely limited in their effectiveness.

This limitation is not because of their quality of personnel, because I know of many FAA inspectors that are making a very worthwhile contribution. It is not because of their organizational inabilities, for they have shown great adeptness in organizing a general aviation accident prevention program that involves many of the local aviation leaders into the program to the degree that it commands much respect and interest from the general aviation public. But as far as effectiveness within the commuter industry, something else is needed.

I personally feel that the problem lies in the basic content of their very own charter, as mandated by Congress. This charter has directly opposing mandates which make it extremely difficult for them to be effective in the commuter aircraft accident prevention area, which I understand is the main area of interest today.

For example, the FAA is charged with fostering "civil aeronautics". In my dictionary, "fostering" means to rear, to promote, to cherish. In other words, to be helpful.

In other portions of their charter, they have such strong enforcement and disciplinary responsibilities that they sometimes come on as policemen conducting a witch hunt which very effectively elimi-

nates many of the communication channels that are vitally neces-
sary to be able to even identify, much less discuss and then hope-
fully help rectify, existing or potential problem areas.

I do not know of many commuters, either borderline or well
established, that are going to invite the FAA in to discuss serious
problem areas for fear that the FAA might uncover some pre-
viously unnoticed requirement hidden in that towering stack of
FAR's for which the FAA could well violate you or, shut your
operation down, and deprive you of making a livelihood not only
for yourself, but also for your many employees that count on your
operation for their paychecks.

I am not suggesting that the FAA's charter be amended, for
maybe both of these mandates, however opposing, are necessary.
know they are necessary in raising a child, but I do not know many
of us in the industry who look upon the FAA as our father. I am
suggesting that we attempt to find some other existing mechanism
or procedure to assist all of us in our continuous quest for in-
creased safety.

One organization that comes to mind as a possible candidate is
group of highly qualified professional accident investigators, who
have investigated all of the airline accidents, both commuter and
certificated, and whose chairman recently and publicly expressed
high degree of interest in why these accidents have happened. The
organization is, of course, the NTSB.

Mr. Chairman, is it possible that the NTSB, without enforcement
or disciplinary authority, be given a mandate to visit the commu-
ers and with their vast technical experience in determining the
cause of accidents, make safety audits or safety surveys in an effo
to determine trends or shortcomings that are part of the anatom
of a past or impending accident, present those detailed findings an
recommendations to the airline—and that airline alone—and wa
away from it without reporting it to anyone else?

This procedure, which gives the airline a clearly defined route
clean their own house, if necessary, and hopefully to effect
creased safety, without fear of being violated, is not without pre
dent.

OSHA has a similar approach in at least 30 States that permit
preinspection of facilities without fear of fines. In the milita
aviation units have employed this technique very effectively for
least 10 years, and as of yesterday, they were planning to ev
increase their efforts in this direction.

Mr. Chairman, I would like to think that all of us who
conscientious and sincere in our quest for increased safety wo
welcome any reasonable and helpful means that would make
operations more safe—and there are many such operations wit
the commuter industry. I know that I would.

Thank you.

Mr. MINETA. Thank you very much, Mr. Connell.

Next, Mr. Crabtree, vice president, operations, Golden West A
lines, Newport Beach, Calif.

Mr. CRABTREE. Thank you, Mr. Chairman.

Golden West Airlines' operations are located at Los Ang
International. We have our maintenance and our operations
at the Los Angeles International Airport.

We are currently serving 11 airports on a fairly concentrated route structure within southern California. We are operating on that route structure 11 deHavilland Twin Otter aircraft, four of the Shorts SD330 aircraft, and by year's end, we will be operating four of the deHavilland Dash-7 aircraft.

In 1979, we served 702,900 passengers in the southern California area in this route structure.

The topic I have been asked to address is the management of operations and maintenance. I have submitted for the record a seven-page text that deals with the management responsibilities both in the operations and in the maintenance areas, and rather than read that into the record, I would submit it to the record for your review, and am ready and, I hope, able, to answer any questions you may have.

Thank you.

Mr. MINETA. Thank you very much.

[The following was received for the record:]

COMMUTER AIRLINE SAFETY

OVERVIEW OF MANAGING OPERATIONS AND MAINTENANCE

PRESENTED

BY

DENNIS J. CRABTREE

SENIOR VICE PRESIDENT-OPERATIONS

GOLDEN WEST AIRLINES

TO

THE HOUSE OF REPRESENTATIVES OVERSIGHT SUBCOMMITTEE OF

PUBLIC WORKS AND TRANSPORTATION

WASHINGTON D. C.

FEBRUARY 27, 1980

A. OPERATIONS

I take this opportunity to share what it is to be accountable for the Operations Department of a commuter airline.

To do so, we must first understand the regulatory basis for commuter operations, in other words, the role of the Federal Aviation Regulations. They are simply, minimum standards, rules which establish the least a manager can do in keeping his operation in order. The federal aviation regulations are certainly very much integral to an airline in the management of safety of flight, but we use them as a digest -- or checklist. They are not the moral fiber that motivates and directs the activities of the carrier. That is my responsibility, as manager, and I will speak to that later.

The checklist used by most commuter airlines is Federal Aviation Regulation Part 135, entitled "Air Taxi Operators and Commercial Operators" -- that's a noteworthy point. The title itself often leads to the misconception by the public that commuter airlines are regulated like a taxi cab or at least something less than an air carrier. That is most unfortunate, since that is certainly not the case. Let's examine what it is to manage a commuter operation under the Part 135 rules.

First let's look at the prerequisites:

--The FAA must certificate the operation -- which can only occur when all the applicable rules are complied with.

--Aircraft must meet FAA standards and be proven in flight to be acceptable for the operation.

--Management personnel must have the required experience and qualifications per FAA standards.

--Manuals specific to the operation must be prepared which contain at least the information and procedures required by the rule -- and -- these manuals must be provided to and followed precisely by all personnel in carrying out their assigned duties.

--The application for a certificate and the carrier's operations specifications must be prepared in accordance with the FAA prescribed format. The operations specifications must detail the specific authorization to be issued the airline, including airport route and weather restrictions and limitations, aircraft maintenance standards, aircraft weight and balance requirements, and any other requirements judged by the FAA to be needed to ensure the safety of flight.

Having been certificated, these functional requirements are ongoing for the operations manager. A continuous monitor must be maintained to assure regulatory compliance, encompassing the following:

--The procedures detailed in the operations manual must continually conform to, or exceed FAA safety standards.

--Adherence to the procedures by pilots and other operations personnel must be checked and surveilled.

--Maintenance records must be executed and updated in a manner that assures current aircraft status. Also, a record of aircraft weight and balance for each flight must be made. It's in the form of a manifest which includes actual takeoff and landing weights, maximum allowable weight, number of passengers, and documentation of the balancing of the load within the center of gravity limitations for that aircraft.

--A record for each pilot must be prepared and kept up-to-date, including the status of the airman certificate, and medical, details of current flight experience, the duties assigned and documents which confirm satisfactory completion of initial and recurrent training, proficiency flight checks, competency tests and route checks. Records of any physical or professional disqualification experienced by the pilot must also be maintained, as well as a control record to assure continuous compliance with flight and duty time limitations.

--Operational systems are required to assure control over each flight, including the monitoring of the flight's progress and the reporting and disseminating of any information on hazards, airspace restrictions or airport conditions that could compromise safety of flight. Procedures are implemented to restrict or suspend operations when any condition is judged to be a hazard to safe operations.

--Current technical information and publications are made available to each pilot, including complete aircraft and equipment manuals, the airmen's information manuals, operational notices and the federal aviation regulations.

--Aircraft records are provided to the pilots before each flight so that they may continuously determine the airworthiness of the aircraft.

--Procedures and systems are implemented and monitored to assure proper loading of the aircraft within FAA prescribed limitations. Aircraft are periodically reweighed and the empty weight and the center of gravity data are available for pilot use.

--Airport runway length, obstacles around the airport, and the routes that are flown are analyzed. This information is then used to assure that the airplane's performance under the condition of flight meets that required to comply with FAA prescribed operating limitations.

--Specific duties and responsibilities are formulated, described and assigned for crewmembers to use in the event of an emergency.

--And finally, training programs are prepared and pilots are given detailed classroom indoctrination regarding the company's operation, its rules and procedures, the aircraft that are operated, their components and systems, and emergency procedures. Also, meteorology communications, and federal aviation regulations are covered. Emergency drills, manuevering exercises, and air traffic control procedures are practiced through hours of flight training in the aircraft before a pilot is allowed to conduct a revenue flight.

The focal point of all these efforts is to assure the reliability of the airplane and its crew members over its mission.

What I've just described is what management must do to meet regulatory compliance. It's the checklist I spoke of in safety of air carrier flight operations.

There is even a more fundamental point for management however. It's the use of morality. There are far too many things that go into the integrity of airline operations management that regulations don't and can't cover. The fact is, all the regulations in the world won't guarantee safety. The best we can expect -- is to control immorality through effective and constructive surveillance and enforcement of the regulations.

For example, how do you select a pilot? If you're looking for a First Officer (co-pilot) the regulation says he must hold at least a commercial pilot's license with a multiengine and instrument rating, have current instrument experience, and have at least a second class medial certificate.

The regulation doesn't say you have to exercise good judgement in making a selection. That's something you do because you want to, because you're concerned, your professional pride demands it, and you need to feel comfortable with you decision that this individual is going to reflect what you are and what your operation is. Sure you are interested whether or not he can fly an airplane. You want to review his technical experience, flight hours, the types of aircraft flown -- the record. But your selection is based on other considerations as well.

Is that individual concerned about aviation? Does he respect himself? Can he work professionally in a team envirnment? Will he respond in a positive manner to training, rules, procedural compliance and constructive criticism? Can he be entrusted with your paycheck, your reputation and perhaps the lives of your family?

You need to know that he's really learning what's taught and that he'll use what he's learned with confidence -- that he's acquiring the ability and attitude to react affirmatively in response to a problem -- that he has an appreciation for why procedures are necessary and why knowledge of aircraft systems are essential. His flight training, route checks, proficiency checks and examinations have to be conducted in a manner that gives you satisfaction that every pilot in fact meets your minimum standards.

B. MAINTENANCE

The role of the aircraft maintenance program is fundamental to the success of any airline, whether commuter, regional or trunk.

For very obvious reasons, the quality of maintenance assures the airworthiness of the aircraft and its systems, as well as the reliability of scheduled service.

From recent press reports, it appears the regulatory requirements and technical sophistication of commuter maintenance programs are not well understood. I would like to provide a brief overview of the important elements of commuter airline maintenance today and how we perceive they contribute to improved air safety.

Perhaps the single most important change associated with the new Part 135 regulations is the imposition on commuter airlines for the first time of specific provisions for airline-type maintenance programs.

Prior to the new rule, the type of maintenance program utilized by a commuter was left to the option of the individual air carrier. While an "approved aircraft inspection program" was required by the old rule, most operators developed their own programs with guidance from FAR Part 43 dealing with maintenance procedures or Part 145, repair station certification.

Since December 1, 1979, with the full implementation of new FAR 135, a "Continuous Airworthiness Maintenance Program" has become the standard for most commuter air carriers. In any complete system of maintenance, areas will overlap, however, the continuous airworthiness maintenance program can be roughly divided into five major categories:

(1) Responsibility for airworthiness,

(2) Maintenance and inspection organization,

(3) Manual requirements,

(4) Reporting requirements, and

(5) Continuing analysis and surveillance.

Although not actually a part of the continuous airworthiness maintenance program, the regulations also provide for a reliability control program. Most operators have so closely intertwined the two that I will treat them as one entity.

Perhaps the key element in airline maintenance is the provision cited in FAR 135.413. It places the responsibility for airworthiness of the aircraft on the "certificate holder," or air carrier, as opposed to a mechanic.

For the first time a single source is identified as being in charge of the air carrier's maintenance program. Along with the responsibility for airworthiness, the regulation also provides the air carrier with the authority to perform maintenance, preventive maintenance and alterations on its own aircraft and equipment, and the authority to approve those aircraft and equipment for return to service after such maintenance has been accomplished.

In combination with the organizational requirements cited by the regulation, this single source accountability provides the air carrier the opportunity to more closely oversee its maintenance activities while providing the Federal Aviation Administration a clear delineation of the air carrier's maintenance chain-of-command.

The maintenance (and inspection) organizations required by regulation are not defined by size, but rather by desired result. They must be "adequate to perform the work." This phrase would appear to be excessively open ended; but when it is studied in conjunction with the other elements of the program (particularly the manual requirements), it becomes obvious that the operator will have to provide the necessary staffing to accomplish the intent of the regulation. Since each provision of the regulation must be met, the lines of authority and the individual personnel within the organization responsible for compliance must be described. While providing flexibility to the carrier to match the maintenance program to operational needs, it also means the maintenance organization must grow as either the complexity or the size of the air carrier's operation increases. The FAA reserves for itself the final acceptance of the organizational structure.

The nucleus of the entire continuous airworthiness maintenance program is the manual requirement.

Quite simply, without an adequate manual to guide the carrier's personnel, its maintenance program can not function as designed by the carrier, or as required by the FAA. This operating manual must describe in detail how each element of the program is to be implemented, the personnel involved, and, most importantly, the interrelationship between each element of the program and the various departments in the carrier's maintenance operation. Perhaps some examples will help to illustrate the importance of this document.

The operating manual specifies in great detail the provisions of the basic maintenance program developed by the air carrier. Such items as scheduled and unscheduled maintenance are covered.

The operating manual also describes the repair and alteration requirements for engines, propellers and appliances on each aircraft the carrier operates. It prescribes the routine inspection and testing requirements, overhaul and life limits for components as well as the aircraft as a whole. Also included are the routine aircraft structural inspections and a comprehensive detailing of the procedures to be followed in the accomplishment of "required inspections."

This section of the operating manual is a major safety enhancement when compared to the previous requirements.

No program is workable unless the personnel involved are knowledgeable in its use. The regulation requires that all maintenance and inspection personnel be trained in their individual jobs, and in the program itself. This training program is contained in the carrier's operating manual.

The manual requirements also assure that adequate record-keeping procedures are developed and followed by the carrier and its personnel. The two major areas of attention are:

(1) proper execution of an airworthiness release or maintenance logbook entry when returning an aircraft to service, and

(2) proper completion of aircraft, engine and appliance work records.

The airworthiness release or maintenance logbook entry is the maintenance department's way of informing the flight crews that they have an airworthy aircraft. Work records are documentation for everything that is accomplished on the aircraft.

The reliability control program recordkeeping procedures are generally integrated in this portion of the manual since some of the documents from the continuous airworthiness maintenance program are the source data for the reliability control program.

Many air carriers contract some of their maintenance to outside facilities. Avionics, instruments and certain other highly sophisticated components are examples of the type of equipment that is most frequently contracted out.

The regulation provides for this by making the contracted agency virtually an extension of the air carrier's own maintenance facility. The regulation, and, hence, the air carrier's operating manual, accomplishes this goal by requiring that the carrier assures that the contractor's facility and equipment are adequate to perform the required work, is using the FAA approved data in accomplishing this work, and that the workmanship meets the same high standards that the air carrier must meet on work performed within its own maintenance facility.

If the carrier contracts out any "required inspections" to such an agency, then the carrier must also assure that the contractor's personnel performing these "required inspections" are properly trained and qualified. Even if the contracted agency is a FAA certified repair station it must still accomplish the work in accordance with the specifications of the air carrier's manual. (The certified repair station is also required to do this by its own operating regulation, FAR Part 145.)

The overall philosophy guiding the development of the operating manual is rather unique among government regulations. Rather than attempting to specify in great detail maintenance procedures in the regulation itself, the FAA imposes certain hard-and-fast guidelines. The carrier then has the discretion to use any procedures that meet its overall operational needs as long as the resulting program complies with FAA's guidelines. Once that determination is made by the FAA, the operating manual, now containing the carrier's individually tailored program, is printed and distributed. The FAA begins to monitor the carrier's aircraft records and maintenance facility to assure that the carrier adheres to the program.

This concept allows flexibility but at the same time constrains the program to a rigid set of safety standards.

The reporting requirements imposed by a continuous airworthiness program retain some previous requirements while introducing two new concepts. The mechanical reliability report and the mechanical interruption summary are continued as before. These two reports provide the FAA with detailed data regarding the service history of components or systems that could derrogate aircraft safety, particularly those that could affect similar aircraft operated by other carriers.

The two new reports are generated by the reliability control program through continuing analysis and surveillance of maintenance histories. The reliability control program report provides the carrier and the FAA with reliability information while the continuing analysis and surveillance system is a macro study of the carrier's entire continuous airworthiness maintenance program.

The continuing analysis and surveillance system is the quality control and audit function for the entire continuous airworthiness maintenance program. The system audits such functions as frequency of unscheduled parts maintenance, currency of publications, accuracy of maintenance records and documents and overall maintenance effectiveness.

The system also provides for the carrier's timely corrective action of any discrepancies uncovered, and hence, is not merely a reporting system. The month end report is usually a combination of worded statements, computer generated printouts and charts or graphs.

If one examines the evolution of maintenance programs within the commuter air carrier industry, it is impossible to arrive at any conclusion other than "they are getting better."

Now, with the inception of the revised FAR Part 135, we believe that many of the safety concepts that the carriers have been attempting to implement, and the FAA wants to see implemented, are possible.

The phrase 'zero defects' is closer to a reality. The operational reliability of commuter air service has been greatly enhanced.

C. CONCLUSION

The responsibility associated with managing safety is a challenging one for all segments of aviation. Commuter airlines throughout the country are responding to this challenge with dedication and professionally motivated attitudes toward airline safety. The overall success of this industry could not have prevailed through so many obstacles had there not been an intense sensitivity to the public's demand for a level of airline safety envied throughout the world. People like myself who are accountable for commuter airline operations departments will continue to manage safety of flight in a manner we are proud of. We will continue to work together in support of the industry and the FAA in it's efforts to assure the technical expertise and moral integrity of all commuter airlines.

Mr. MINETA. Next, Mr. David Ferrucci, vice president, operations, Ransome Airlines, in Bensalem, Pa.

Mr. FERRUCCI. I thank you for this opportunity to address the committee concerning commuter airline operations. I will start with a brief background of myself and my employer, Ransome Airlines.

At the present time, I am the vice president of operations and maintenance for Ransome. I am directly responsible for the dispatch and safety of all flights, plus an overall responsibility for all aircraft maintenance and training.

Ransome is an Allegheny commuter serving 13 markets with 183 flights a day with a route structure extending from Washington, D.C., in the South, to Boston in the North.

In addition to Boston and Washington, we serve Philadelphia, north Philadelphia, Trenton, Newark, La Guardia, Kennedy, Sullivan County, which is in the Catskills, Hartford, Islip, Providence, and New London.

During 1979, we transported 616,200 passengers. We will transport our 3 millionth passenger sometime next month, and we project that we will transport just under a million passengers in 1980.

We operate a fleet of 15 turboprop aircraft, consisting of 12 twin-engine aircraft manufactured by Aerospatiale in France; two 50-passenger Dash-7's, which are four-engine STOL aircraft, manufactured by deHavilland of Canada, and one 19-passenger deHavilland Twin Otter. During the next 4 years, Ransome will add nine additional Dash-7 aircraft to its fleet.

At the present time, we operate under three separate Federal air regulations: FAR part 135, part 121 supplemental, and part 121 domestic. We come under the jurisdiction of the FAA air carrier office at Teterboro, N.J.

I would like to depart from my prepared text for a moment and show the committee the manuals that Ransome has had to write and publish with those regulations that I just mentioned. The total is 19, and every airline at this table has had to go through a similar exercise.

I have been asked to comment on how Ransome has managed to grow so rapidly and successfully while maintaining a safe and profitable operation.

I believe the major reason is that it has been a company philosophy that the Federal air regulations under which we operate are considered to be the minimum standard rather than the norm.

We have constantly gone beyond the basic requirements in such areas as management staffing, pilot training, and aircraft equipment. We have done this because we feel it is in the best interest of our customers, their safety and our growth and profitability.

This is not to say that Ransome does not support the Federal air regulations. On the contrary. We strongly support the new FAR 135, which will govern most commuter operations. However, we believe that the industry and the FAA must be given time to implement this new regulation. Better communication between the agency and industry is needed if the new regulation is to be effective.

The recently announced FAA policy requiring each region to host quarterly meetings with the commuter operators in their area is a major step in establishing this vital communications link.

Rapid growth of the industry will continue throughout this decade, and we at Ransome believe that the commuters can and will provide the public with air transportation that is as safe and dependable as the major carriers.

Thank you.

Mr. MINETA. Thank you very much, Mr. Ferrucci.

Next, we have Mr. F. E. (Pete) Howe, vice president and general manager of Rio Airways, Killeen, Tex.

Mr. HOWE. Thank you, Mr. Chairman.

I am appearing in a dual role here, not only as the chief operating officer of my own airline, Rio Airways in Killeen, Tex., but also as chairman of the board of the Commuter Association of America, which is the industry organization for the commuter airlines.

Rio Airways, which has been in business since 1967, now ranks somewhere third or fourth in its size among all the commuters in the United States.

Killeen is located in central Texas, and we operate a route system which embraces 12 cities at present. We will add a 13th on this coming Saturday, when we start into Greenville, Miss., serving at that city into Memphis.

Our system basically is hubbed on Dallas-Fort Worth Regional Airport, which, as you know, is one of the largest connecting airports in the United States.

We operate a fleet of 18 aircraft: 4 Beechcraft 99; 5 Sweringen Metros, and 9 Twin Otter aircraft—all turboprop airplanes. We have on order two Dash-7's, two more Otters and two more Metros. At that time, we anticipate retiring the Beechcraft 99's from our system.

We employ some 465 people, 144 of which are pilots. We operate, as I said, into Dallas-Fort Worth, and we also operate into Houston Intercontinental and into Memphis, Tenn.

We are, believe it or not, the second-largest operator in terms of aircraft movements in the Dallas-Fort Worth Airport. We have 176 flights a day in and out of there, and we operate a total of 212 flights a day throughout our system.

At that point, I will pick up my prepared remarks at page 2. I want to emphasize—and I speak now primarily as the Chairman of the Board of the CAAA—I wish to emphasize that our industry firmly supports a review of commuter airline standards and practices. We have voluntarily and willingly provided extensive, comprehensive information to all who want to know more about our industry, and many of our industry leaders and executives have testified at various hearings.

We believe that a thorough, reasoned assessment of our industry by your committee will demonstrate that commuter airlines operate to rigorous regulatory standards under extensive and intensive FAA surveillance, that we provide a safe, reliable, and very necessary scheduled airline service to our country. To the extent that safety problems exist, we too want to know about them, and we want to correct them.

Our commuter airline industry is comprised of several hundred carriers providing service to practically every State in the Union, Canada and Mexico.

During the year just ended, 1979, our industry carried some 12 million passengers. Our airlines vary in size and complexity; from those who operate single engine, six-place airplanes, to those who operate four-engine, 50-passenger turboprop aircraft; from those who carry a few thousand passengers annually to those whose annual passenger totals approach the 1 million mark.

My own airline carried approximately one-half million passengers in 1979. Our carriers provide passengers, cargo and mail services in rural areas as well as in high-density intercity markets. Some of ou arriers operate under FAR part 135, some under FAR part 121, and some under both.

We point out these factors to emphasize the diversity of operating characteristics and environments in which our airlines operate.

During the past several years, the Federal Aviation Administration, with the full support of our industry, has reviewed its regulation of our operations. This review has resulted in a new FAR part 135 which now governs the commuter airlines. We are confident that this new part 135 will have a most favorable impact on the safety record of the commuters.

The single biggest problem for the commuters in complying with FAA regulation has been the lack of consistency in the interpretation of the regulations from FAA region to FAA region and often from carrier to carrier.

To help solve this problem, the FAA proposes to hold an annual conference at which time commuter airline operations, maintenance and management standards and practices will be reviewed.

The first of those symposia was held several weeks ago, here in Washington. That meeting was most successful with broad industry-government participation and cooperation.

As a followup to that annual symposium, at the urging of our industry, the FAA will conduct regional meetings during the coming year throughout the country. The principal objective of these regional meetings will be to assure a consistent, nationwide application of FAR part 135 regulations.

We believe these regional meetings will be most beneficial and will help our operators and the FAA to pinpoint any further deficiencies which may become evident in the future.

We have been queried as to the surveillance by FAA of our industry, and whether or not it is adequate. I can speak as to our experience at Rio. It has been adequate. We have worked closely with the FAA representatives. It is to both of our best interests that we do work closely. We also recognize that improvements to any operation are always possible.

In this regard, we offer the following comments: First, The FAA must establish consistent staffing standards which provide even-handed surveillance of commuter airlines on a nationwide basis. This staffing standard must assure that there is sufficient personnel available in each district office to properly monitor commuter airlines within that district. This staffing standard must take into consideration both the workload imposed by the FAA policies and

the size and complexity of the airline operations that are to be surveilled.

Second, historically, commuter airlines have been monitored by FAA personnel with primarily general aviation backgrounds. The new FAA part 135 is virtually an airline standard. Many of its provisions, including use of minimum equipment lists and the aircraft maintenance programs are taken directly from FAR part 121. We suggest that FAA surveillance has lagged behind the commuter industry practices because some FAA personnel do not fully understand or appreciate the fundamental differences between general aviation operations and those of the airline industry.

Too, this situation is complicated by the fact that FAA operations and maintenance inspectors are often assigned general aviation responsibilities in addition to their commuter oversight functions.

We believe additional personnel training, the timely distribution of advisory materials such as a current part 135 surveillance handbook, and the development of commuter airline specialists would be very advisable.

Third, a get-tough policy of enforcement is not in itself effective in promoting air safety. Many commuter airlines face transitional problems associated with growth.

As airlines expand and graduate to larger, more sophisticated flight equipment, regulatory requirements do change. Frequently, the airline operator needs guidance to meet these changing requirements, such as preparing new operations manuals, record-keeping systems, and installing personnel training programs.

The FAA should assist in implementing optimum programs and practices in consideration of the carrier's size and complexity of operation.

Fourth, finally, we feel that the FAA has the tools it needs to adhere to its regulations. It can impose substantial fines for violations; it can ground un-airworthy aircraft; it can lift the operating certificate of any carrier that fails to make the commitment to safety that the vast majority of commuter airlines have made.

We have a safe, reliable, responsible industry. We share in and dedicate ourselves to any and all programs of the FAA or any other interested organization that will further the progress and safety of our industry.

Thank you.

Mr. MINETA. Thank you very much, Mr. Howe.

As I listened to your testimony and see all of you before us right now, you are the tops in your industry. You have proven that by not only your record of earnings, but also your performance levels. So we are very pleased to have you before us.

I think that from your experience, we should be able to learn a great deal from you to be able to let others within the industry know how to get things done. I think this is one of the critical issues facing the industry. We keep hearing this phrase, "bad apple." None of you are in that category at all. Yet the industry itself gets judged on the basis of the bad apples.

So we are really appreciative of the time that you are taking to be here with us.

First let me get into this part, dealing with operations and just ask generally how each of you select your pilots. What kind of checks do you conduct prior to employing them, relative to their prior flying experience. I know that FAR 135 has certain kinds of requirements, that they talk about in terms of duty hours, flying time, but they do not speak of minimum requirements for being a pilot. I am wondering if any of your companies have established any of those.

I think Mr. Adcock talked about the average of their pilots. Was it in excess of 3,000 hours?

Mr. ADCOCK. 6,000 total and 3,000 multi.

Mr. MINETA. 6,000. And in that example, Mr. Adcock, is that a company minimum, or is this just a compilation of the pilots you have and how it works out arithmetically, or do you actually set some minimum requirements for your pilots?

Mr. ADCOCK. We do. Our minimum standards are 3,000 total and 1,000 multi, and the evaluation process from there is no different for pilots, in our viewpoint, than anyone else. It is greatly dependent on the individual. We need a starting place that we feel is a minimum level, regardless of somebody's past experience.

There has been a recent rulemaking, due to take effect the end of this week, March 1, in which the FAA has established some minimum operating experience requirements, taken directly out of part 121 for the most part. Again, those pretty much reflect our own philosophy, and that requires 15 hours make and model experience, which would certainly be a minimum, regardless of anybody's overall level of experience.

However, in our response to this regulatory process, which is Docket 2011, we indicated that the FAA has failed to address, after much consideration in this area, a minimum multiengine level of realistic experience. This requirement would allow a pilot with 15 hours' multiengine time to operate as pilot in command of a commuter aircraft, and that simply does not realistically address the situation insofar as we see it, and the portion of the regulation that presents the particular problem for us, secondarily to that, addresses the single-pilot issue which, if they establish thereby an artibrary level of 100 hours' make and model experience to act as pilot in command IFR commuter passenger-carrying operations in a single-pilot environment, that, in our feeling, is unrealistic, not really assessing the problem that we are dealing with. That still would qualify a man with only 100 hours' multiengine experience to operate as pilot in command of a passenger-carrying commuter operation, an IFR operation, while at the same time prohibiting a pilot with 4,000 or 5,000 hours' multiengine experience, and 15, 20, or 30 hours', whatever make and model was appropriate, to raise that man to a level of proficiency to operate, and this is going to put an extreme burden on the commuter industry in this area in single-pilot operations, because there is such a variety of commuter aircraft in the fleet, and very few pilots have had an opportunity to accrue 100 hours in each particular make and model.

Mr. MINETA. The docket you referred to is still open to comment until the first of April, is that correct?

Mr. ADCOCK. No, sir. It was kind of a strange process, basically. It is effective April—well, yes, sir, that is correct, it is open until

April 1, but the regulation is effective March 1, and then we would get to comment on it after the regulation takes effect.

Mr. MINETA. That is a new procedure.

Mr. ADCOCK. Yes; it was novel.

Mr. MINETA. Let me ask, Mr. Adcock, in terms of your 3,000 hours' total time and 1,000 hours multiengine, how did you come to those figures?

Mr. ADCOCK. Essentially, my own operating experience, and assessing what I have seen in both general aviation and commuter operations. I just feel that that is a minimum standard, and that is where we have operated since day one.

Mr. MINETA. What about the other airlines?

Mr. CONNELL. Ours are basically the same, sir. Our minimum for captain is 4,000 hours total time, 1,200 hours multi, of course, ATP. But we add one requirement that he has flown with us at least 1 year, to get demonstrated proficiency in both winter and summer flying, which we consider to be extremely important.

Mr. MINETA. Before becoming a command pilot?

Mr. CONNELL. That is correct, sir.

Mr. CRABTREE. Golden West has basically the same requirements. Our minimum for hiring a first officer is 3,000 hours; we look for 1,000 hours multiengine. However, we have accepted pilots with 500 hours minimum.

We came up with those numbers as a result of the marketplace. The pilot applicants that we have available. It became a competitive requirement. I do not think there is anything magic about 3,000 hours or 5,000 hours. We have found the level of proficiency at that 3,000-hour mark to be satisfactory to meet our minimum standards for a pilot.

The process of selection at Golden West is a fairly extensive process. We go through a preindoctrination—or preemployment process—that includes written examinations on basic FAR's, basic airmanship. Prior to a pilot being put into class for example, he will be given a flight evaluation in an aircraft with our chief pilot or one of our check pilots, and a decision is made from a number of candidates to make a determination who is competitively going to be in that class.

Mr. MINETA. In your case, is your chief pilot or your test pilot also a line command pilot, as well?

Mr. CRABTREE. Negative. Our chief pilot is a full-time chief pilot. He is supported by an assistant chief pilot. However, we have now four check airmen that are also line pilots. They also operate as line pilots.

Mr. MINETA. And at Ransome, Mr. Ferrucci?

Mr. FERRUCCI. Our minimums are the same as the other gentlemen, 3,000 hours minimum, 1,200 hours multiengine. We prefer 500 hours of turbine time. We have waivered any of those requirements at one time or another for what we thought were good reasons, but by and large, those are the requirements.

The selection process at Ransome is rather involved. When you send in your application, it is graded in three categories; one that we would very much be interested in, one that we might be interested in, and one that we would not be interested in, and this is

based on the experience level, the type of equipment that you have operated, et cetera.

And then the candidate—normally, they all come out of the first class, of course. In 1979, we hired 59 pilots; we screened 600-some applicants. Those 59 people that were selected were brought in and tested, and we have a curve on the test which we have found through experience. For instance, if; a pilot has a low mechanical test, we have found that he normally does not make a good pilot. So we have established certain bell curves that, if we are going to hire you, you have to be in there.

Then all the prospective candidates are interviewed by both the chief pilot and chief pilot's assistant, individually, and they grade them. If both of them agree that you are an acceptable candidate then you are admitted. If one of them disagrees, they go back and they decide why you thought he was all right, and I did not. If they can work out the problem, then we accept him; if we cannot, then he is not accepted. It is a rather long process.

Mr. MINETA. Mr. Howe.

Mr. HOWE. In the case of Rio, it is 3,000 hours required for a captain, 1,000 hours multiengine, at least 500 turbine; for a copilot, 1,500 hours minimum.

We do on occasion hire directly for the captains for the left seat, because of the lack of qualified candidates in our organization.

We currently employ 144 pilots, and our process in selecting them is much the same as the others. We bring in a class. Unbelievably, there is a terrific group of pilots available for hire, and we are able to be very selective. The last time I checked, we had 300 applications on file, of people who basically meet the primary requirements of our organization.

But our people do much the same. They go through with our chief pilot, who is not a line captain, but strictly an administrative pilot. We have two assistant chief pilots who are line captains, and we have three captains that are designated as FAA check pilots, to give our checks.

When we hire our people, they are interviewed by the chief pilot, by one of the assistant chief pilots and finally, by the vice president of operations, who himself is a graded pilot. And from that group, they determine who goes into the class, and then from those who perform in the class, which is usually of a week's duration, which includes the FAR's and mechanical questions, as well as their flight ability, and then they are given a flight test at the end of that, and out of that comes the group that goes into active training, which is another week of training usually, before they go on the line.

Mr. MINETA. So in all of your experience right here, none of you have chief pilots who are also line pilots. There are actually administrative positions—is that correct, Mr. Connell, in your example?

Mr. CONNELL. No, sir. We are small enough to where the chief pilot sometimes acts as a reserve when we have someone who is unexpectedly sick. But he does not fly the line normally. He is also our check airman.

Mr. MINETA. Mr. Adcock, what about Tennessee Airways?

Mr. ADCOCK. Mostly the same, but with some variety. Both our chief pilot and our director of operations and myself all fly the line

on a scheduled basis, usually once a week, just to maintain touch with reality and what is going on out there.

Mr. MINETA. And what about as far as the logs are concerned; how do you maintain control over the hours, in terms of flying hours and duty hours of your pilots?

Mr. ADCOCK. We have a limitation of 4 hours flight time and 8 hours duty time that we work within under normal parameters. Of course, weather and scheduling can affect that at some times. But those are the parameters that we shoot for in our scheduling, and that is a 5-day-a-week operation. It equates to about 90 hours a month when all is said and done, but 90 hours a month can take on different proportions depending on how it is lumped together, so we put our emphasis on the daily scheduling, which is 4 hours flight and 8 hours duty.

Mr. MINETA. Do you have any single-pilot operations?

Mr. ADCOCK. All of our operations are single-pilot, yes, sir.

Mr. MINETA. Under 135, the requirement is 10, and that is still within the 14-hour-duty day.

Mr. ADCOCK. Our requirements are approximately half of the regulatory requirements. In our appraisal and, I think universally throughout the industry, that is just not a practical schedule, and there is a regulatory process due to take place to more accurately reflect reality with that regulation, I think.

Mr. MINETA. And the hours that are logged, what is the control on those hours?

Mr. CRABTREE. For the most part, that control with Golden West Airlines is exercised within the dispatch unit. The schedule is published, and in our situation, there are lines of time which are published for bid. The number of landings in a day, total number of duty hours in a day, and the total flight time in a day and for a bid period, for a scheduled period, are, in our case, prescribed by contract. It is the same as we have had as company policy for a number of years. And the control of that is done in our dispatch unit through the scheduling function of the dispatch unit.

The monitor of the time is also maintained by dispatch. We also have a clerk who monitors that time and enters it into the individual pilot records on a daily basis.

Mr. MINETA. Now, the 135 does not require any minimum amount of multiengine time for a pilot to act as a command pilot on commuter aircraft.

Should there be a minimum set in the regulations? I think most of you are all above the minimums. Should that be set by regulation?

Mr. ADCOCK. Well, we certainly think so, and our address to this rulemaking speaks for Tennessee Airways, and I think everyone here on the panel has indicated that our own company standards are certainly set to minimum there, and there should be no reason to think that an operator would have any justifiable reason to deviate significantly from those minimums. I think we all evaluate the individual, and perhaps the minimum of 1,000 hours, if it were a regulatory minimum for multiengine experience, might be a little stiff to deal with. We proposed a 500-hour absolute minimum in our response to this. I have our response to this, if you would like us to submit it for the record.

Mr. MINETA. That would be fine.

[The following was received for the record.]

TENNESSEE AIRWAYS
McGhee Tyson Airport,
Alcoa, Tennessee 37701 (615) 573-5100

February 13, 1980

Comments re: Docket # 2011 (Commuter Pilot in Command Operating Experience)

As addressed in the attached Comments to the NTSB Commuter Air Safety Hearing, we support the improvement in safety and professionalism in commuter operations to be realized through the implementation of strengthened minimum standards. While the Operating Experience Requirements outlined under the proposed 135.244 are an accurate reflection of adequate minimum standards as previously established in 121.434, the requirement for 100 hours experience make and model appears to be an over-reaction to only one of several areas needing attention.

This amendment fails to address the general subject of multi-engine proficiency. After prefacing the amendment with several accounts of multi-engine commuter accidents in which the pilot lost control of the aircraft (citing these as justification for the amendment), no mention of a minimum level of multi engine experience is mentioned in the text. Consequently, the regulation authorizes a pilot with only 100 hours multi engine time to act as Pilot in Command of a Single Pilot IFR Commuter passenger carrying flight --- while prohibiting a pilot with 1000 hours multi engine experience (and who has met the make and model operating experience requirements) from acting in this capacity.

A more realistic approach to improved safety in this area would certainly be the establishment of a minimum standard of multi-engine experience (e.g. 500 hours) ---to be complimented by the proposed minimum operating experience requirement in make and model. Considering the wide variety of general aviation aircraft which are utilized in Single Pilot IFR operations, it would be an unrealistic financial and logistical burden to impose a minimum requirement of 100 hours initial experience for EVERY MAKE AND MODEL. With an average ticket price of $50 and an average stage length of one hour --- that would equate to $5000 in lost revenue alone for each newly hired Captain without that SPECIFIC experience.

Therefore we would propose the adoption of a minimum level of multi-engine experienc to act as Pilot in Command of a multi-engine aircraft in Commuter passenger carrying operations to complement the proposed Operating Experience Requirement --- and DELETION of any specific ADDITIONAL experience for Single Pilot operations

Stuart E. Adcock
President

Mr. ROYER. Would the gentleman yield on that point?

Mr. MINETA. I would be pleased to yield to my colleague, Mr. Royer.

Mr. ROYER. I was a little bit concerned about that question, too, and Mr. Adcock, you did indicate earlier that you felt that there should be a minimum, but in the rest of the testimony, everybody more or less admitted that they varied somewhat from their own requirements. And I am wondering if you want to tie yourself with some kind of a minimum and then find that you have justifications, as you have done in these other areas. You have set some fairly high standards, I recognize, but on the other hand, there has been indication that you have varied from them.

Mr. ADCOCK. Yes, sir.

Mr. ROYER. And I am wondering if putting an unusually low minimum is really of much benefit.

Mr. ADCOCK. Well, 500 hours is significantly better than none, which is what we have now.

Mr. ROYER. But I guess what I am saying is has anybody gone below that?

Mr. ADCOCK. Yes, sir.

Mr. CRABTREE. I do not think that the number is a significant factor, as much as the integrity of the manager that is making the selection. I have seen pilots with 100 hours multengine time and 2,500 hours of total flight time, who have performed to my minimum standards. So it is a matter of proficiency, when a guideline has to be established, and we at Golden West have established the guideline of no less than 500 hours. We use 1,000 hours as the number that is competitive, because that is the type of pilot and the class of pilot that we have available to us at this time.

Mr. ROYER. That was going to be my other question, Mr. Chairman. It would seem to me that the testimony pretty well indicated that you do not have to get down to those kinds of minimums in order to get the kind of people you are looking for.

Mr. CRABTREE. Right.

Mr. FERRUCCI. In Ransome's case, the exceptions that we made were to put what we felt were highly motivated young aviators who had served in a flight-following capacity for a year or a year and a half, and they still did not meet our own company minimums. We have flown these people on the corporate jet and copilot positions. We knew that their proficiency was good. It was just the type of individual that we would like to give a chance, so we waivered our own minimums in order to induct them. That is the only time that we did this. Of the 59 pilots that we hired, every one of them is over 3,000 hours.

Mr. ROYER. I thank the gentleman for yielding.

Mr. MINETA. Certainly.

On that point, are you finding that with this backlog of applications that all of you seem to be having, that this is coming from the furloughing from the trunks and regional carriers?

Mr. FERRUCCI. In our case, we have never seen an application from a furloughed, certificated carrier. Most of the applications—there are three general categories. You have the retired military officer, aviator; you have the first tour military aviator, who has finished a 4-year stint and comes to you—generally, if he has been

in heavy equipment, he has over the 3,000 hours; and then you have the so-called grassfield individual, who has managed to accumulate his licenses and his ratings on his own at a civilian flight school.

Mr. MINETA. Let me just ask one question about a regulatory change that is now under consideration, which would restrict or eliminate the provisions authorizing the use of an autopilot in lieu of a copilot in small aircraft that has less than 10 passengers.

I wonder if you would care to comment on this subject, especially those who are operators of small aircraft. As I recall, Mr. Adcock, you have the 402B, which is less than 10 passengers.

Mr. ADCOCK. Yes, sir. It is our feeling that the issuance of a regulation to that effect would very much eliminate a very essential phase of air transportation as the commuters can provide it. This has been the backbone to the development of many new routes and the expansion of routes from smaller communities to hubs or between small communities. And in our analysis, a piston-engine aircraft with less than 10 passengers that is properly equipped for all weather operations and maintained properly is very, very difficult to operate at anything beyond a breakeven level when you fill more than one of the seats with a nonrevenue passenger. This would be no different than the logistics of operating a DC-9 with 20 copilots on it. It would present a bit of a logistical problem.

There is to my knowledge no compendium of information anywhere that would indicate the single-pilot operation is more hazardous than a two-pilot operation. There is certainly a world of benefits in having a copilot, and wherever it is logistically feasible or demanded by the particular peculiarities of a route structure, such as high-density operations, which in that situation, you may be faced with a circumstance where there is no alternative—in our case, we do not operate into any high workload environments, and our pilots are, of course, recertified every 6 months for their particular ability to cope with higher workloads in a single-pilot environment, and we feel that there is no compromise in safety there. I do not believe that we could operate in a two-pilot environment with the same standards that we maintain now.

Mr. MINETA. Fine. Let me ask Mr. Howe, do you also have small aircraft?

Mr. HOWE. No, sir. They are all twin turbine.

Mr. MINETA. I am sorry. OK.

Mr. Goldwater.

Mr. GOLDWATER. Mr. Chairman, I would like to yield to my colleague, Mr. Clinger.

Mr. MINETA. Mr. Clinger.

Mr. CLINGER. Thank you, Mr. Chairman.

My concern was that the statistics on accidents per 100,000 miles would perhaps be slightly misleading because there are vastly more takeoffs and landings involved on commuter aircraft as compared with the major airlines.

Would anybody care to comment on that? Do you think that it is fair to say that the accident rate is extremely high comparatively in the commuter industry?

Mr. HOWE. I do not agree with that position that has been presented. One of the reasons is that there are too many all-embracing figures used in compiling those figures. For example, if you use all of the operations of those carriers, such as ourselves, that operate high-frequency systems and so forth, you will find that the accident rate is excellent.

Most of the problems, to whatever extent they exist, have been in the smaller carriers, in the small operations, that I do not class as a scheduled air carrier in and of itself.

Mr. CLINGER. And yet they are required to meet the certification standards.

Mr. HOWE. They are required to meet them. The question has been raised as to whether or not they do. I have no way of knowing that. I have no more knowledge of that than you would have. I know only my home carrier.

But I do hear and read and so forth, that there seems to be some indication that even though they should meet some standards, they do not.

But I just feel so strongly, and that is the reason that every opportunity I get to come here to Washington and talk about it, I feel so strongly about those group of carriers like ourselves, and the gentlemen sitting here with me. We operate to a standard every bit as stringent and every bit as good, and as powerful and strong as any carrier in the nation.

Mr. CLINGER. So you would say it really is unfair, then——

Mr. HOWE. I would say that, yes, sir.

Mr. CLINGER [continuing]. To have statistics that would seem to show a substantial difference in the accident rate.

Mr. HOWE. Yes, sir.

Mr. CLINGER. With regard to the "bad apples" in the industry, as the Chairman said, I gather you would concur that we do have problems with the number of smaller, flying-by-the-seat-of-their-pants operators who are perhaps deliberately trying to cut corners on safety?

Mr. HOWE. That appears to be right, yes, sir.

Mr. CLINGER. How do we control that?

Mr. HOWE. Well, I think that is a duty that has been assigned and already comes under the jurisdiction of the FAA. That is the only way I know to control it—I would not want to be made a vigilante myself to try and police the industry. I worry about policing Rio Airways, and that is all, as I have stated.

The regulations are there, the requirements are there, the FAA is charged with the responsibility, and I believe that is where the responsibility lies and where the action should be taken.

Mr. CLINGER. I gather from some of your testimony that your main feeling as far as the FAA inspection procedures and inspection personnel go is that either there is a shortage of personnel or that the personnel, because they have been concerned primarily with general aviation, are not really trained to do the kind of inspections that are involved in commuter inspections.

Mr. FERRUCCI. That is not true in Ransome's case.

Mr. CLINGER. What is not true?

Mr. FERRUCCI. There is no shortage of personnel. They are not general aviation. We operate all of our aircraft but one under part

121, under supplemental or domestic. As such, the office that holds our certificate is an air carrier office, who happens to hold U.S. Air's and some other people.

So the principal FAA inspectors that are assigned to Ransome's certificate are not general aviation types. They are air carriers, they are knowledgeable, and there is no shortage of them.

The problem we have is the lack of communications within the FAA, from the top down and the bottom back. I hear constantly from my own inspectors that when a new rule comes out, they have never been asked in the field what effect this may have.

A recent example of this is one on flight attendant seats. I believe the public hearing on this was in 1975 or 1976. On February 4th, they published it as a rule, some 5 years after the original hearing. The compliance date is March 6th. This requires major engineering changes in 14 of my airplanes. There is no way that I can possibly comply with that.

Mr. CLINGER. It is unrealistic?

Mr. FERRUCCI. It is unrealistic. When I call my FAA inspector, he does not even have the rule, and he has no idea what it comprises. So again, you have a complete breakdown in communication.

Mr. CLINGER. Did you want me to yield, Mr. Royer?

Mr. ROYER. If the gentleman would yield for just a moment, I would appreciate it.

I know that in your statement, you indicated that it was not a problem, but both Mr. Howe and Mr. Connell, as the gentleman has indicated, did refer to it in their statements—Mr. Connell's statement indicated that possibly the NTSB ought to be invited in to do some of these inspections kind of on a preliminary basis, without any authority, which is an indication to me that you somehow feel that the FAA is not equipped. And then, in other testimony, Mr. Howe was very direct in indicating that they feel that with some of the advanced technology, that they are not up-to-speed, and because, as the gentleman indicated, they are doing general aviation.

I guess my question is, Is it not possible for them to be capable in both of those areas? We have got a lot of situations around here where we have people that just pick up desks, just pick up typewriters, and so on, and that kind of troubles me. So I would hope that we could use these people in both areas. I agree that they ought to be trained, though.

Mr. CLINGER. That is what I am trying to get at.

Mr. HOWE. In terms of my statement, my statement was made primarily in connection with an industry problem, not directly in connection with Rio. I was speaking of areas in the commuter industry.

I would agree with you that there are situations where they can be experts in both fields. Now, I do not agree that it can be that way where it is a large carrier, such as Rio or Golden West or Ransome, or someone that has sophisticated aircraft and a large system with a great number of airplanes, a great number of employees, a great number of licensed mechanics and licensed pilots, and so forth. I think in those cases, we do have to have special training again. That is what I was addressing myself to in the

erall remarks, that this is a very diversified industry. We go
om the "mom and pop" with the PA18 up to the Dash-7's, which
me of us have on order and which some of us are already operat-
g. That is what makes it so difficult to really, I think, draw the
e as to just exactly how everything should work. I think we have
go to adapting ourselves to the conditions which exist in a
rticular area, a particular carrier, and so forth.
We have problems. For example, we operate into two GADO's.
ne is Houston, and one is in San Antonio. And the one in Hous-
n does not agree with the way we start our airplanes, and they
e always fussing at us over there. We had not operated into the
ouston GADO until December of 1977, and we have been operat-
g since 1967. We had no problem with the GADO at San Antonio
out how we start engines; Houston fusses at us. Those are little
ings, but they are the type of things.
We run into problems with hard time versus on-condition on the
aintenance of certain items on the airplane, avionics and so
rth. Why does one carrier get on-condition and another carrier
ave hard time, and they have both been operating the same
rcraft, the same avionics, and so forth.
Mr. CLINGER. Are you hopeful that these regional conferences
ould perhaps address some of these problems?
Mr. HOWE. That is exactly why we push so hard for them. If we
ould get those various guys together and let them see that the guy
n San Antonio is saying something different from the guy in
louston, instead of never getting together. This has been our big-
est problem. They never relate to each other. You would think we
ere operating x number of different airlines and different
ADO's and everything else; we have got x number of FAA's all
ver the country.
This is the biggest thing that people complain to me about in the
ndustry.
Mr. CLINGER. Yesterday, the representative from the NTSB, Mr.
King, answered a question, and he said that the problem really was
shortage of personnel. I gather, then, that there is disagreement
within the panel that that is, in fact, the case.
Would anyone else want to comment on that?
Mr. CRABTREE. I think I can fortify that disagreement. In Golden
West's case, I think the personnel are adequate to do the job. I
think the support they receive from FAA management is inad-
equate. It is not unusual for a rule or an airworthiness directive or
some directive to the field to come out, and I will have it well in
advance of our field inspectors, and I will be advising them and
seeking counsel from them, and they have not even gotten it yet.
Consequently, we get into the problem together, at the same time,
and ultimately, we have got to go back to Washington or someplace
in the region.
Yes, I think our work force that works with us is adequate.
Mr. CLINGER. One thing that occurred to me from listening to
testimony is that there seems to be a general feeling that, because
of the conflict in the congressional mandate between fostering
aviation and requiring standards, there is too much of an emphasis
on enforcement as opposed to help. And it occurred to me that this
might also be the case in effect that because they are overextended,

that it is certainly a lot quicker to enforce a regulation than to assist somebody in trying to meet it, a more time-consuming, laborious process. I am wondering whether that might have some validity.

Mr. FERRUCCI. I think you may also find that the 3 of us here at the table are in the top 10. We obviously do not suffer from lack of supervision or observation by the FAA.

I am not sure that is true if you are a small operator, particularly in an area that may have a tremendous number of small operators and one GADO is tasked with trying to supervise these people, maybe over a two- to three-State area.

Mr. CLINGER. So it may be a kind of a parochial thing.

Mr. FERRUCCI. Yes.

Mr. CRABTREE. Well, I think the point that we cannot pass up in this dialog is that there needs to be standardization. We as a carrier, or as an association of carriers, cannot establish what the work force is for the FAA, but the consistent application of whatever standards they establish is definitely necessary. We hear this trumpeted throughout the industry, and it is not a new problem; it has been with us a long time. Carriers will talk to me, and they have got a completely different FAA that they are dealing with. They have got a different staffing level in their areas than what I have in ours. And I can go across the country and talk back and forth with a number of carriers. There is a very definite lack of consistency in the staffing standards and/or the proficiency and specialization of the inspectors.

Mr. CLINGER. Do you think we can ever really totally solve that problem? Aren't there always going to be variations?

Mr. FERRUCCI. Well, Ransome has proposed to the FAA that they establish an office of standardization, so in the case where Mr. Crabtree's region tells him one thing, and mine tells me another, and we are both reading the same regulation, that you go to this central office on Independence Avenue, and he makes a decision, and that decision stands for the whole FAA. At least that way, we would have a standard——

Mr. CLINGER. Kind of an internal administrative review process.

Mr. FERRUCCI. Yes, and the FAA's remark to that was that they could never handle that; it would be too powerful an office that anybody would have that much authority that it could dictate to all regions, "This is what this rule means."

We still think that that is the only way you are going to do it. The military does it very much like that. They have a standardization system where a given model airplane is standardized all the way through the Navy or the Air Force, and if there is any dispute on how you fly it or how you maintain it, it goes to the standardization committee, and a set rule comes out, and everybody in the Navy maintains that airplane or flies it in that manner.

Mr. CLINGER. And you think you would prefer to live with that kind of a final rule?

Mr. FERRUCCI. Ransome definitely would. We have such things even within our own region, Southern Jersey Airways operates a fleet of Twin Otters. There was an FAA requirement for placing radar in Twin Otters on December 1. They were able to buy the

Bendix radar and put it in their airplane on an engineering change order.

I had one Twin Otter. I bought the same radar, and my avionics inspector insisted on a supplemental certificate to put the same brand radar in the same airplane in the same region. And his defense was that I do not read it right.

Mr. CLINGER. One of the comments yesterday was that perhaps the FAA maintenance inspections were not done at the time when most of the maintenance went on, which I understand is from 10 or 11 at night until 7 in the morning. Has that been your experience?

Mr. FERRUCCI. That is changing since the NTSB meetings. I have been a lot of them at night since then.

Mr. HOWE. We have had a lot of night business, too.

Mr. CRABTREE. We have, too.

Mr. CLINGER. Is that right?

Mr. CRABTREE. But it seems very timely and relevant to current times.

Mr. FERRUCCI. I think that the NTSB advised the FAA that we do work at night, and that is when they first learned of it.

Mr. CLINGER. Mr. Chairman, I have further questions, but I think my time has expired.

Mr. MINETA. Thank you, Mr. Clinger.

Mr. Fary.

Mr. FARY. Thank you, Mr. Chairman.

Any of you gentlemen can answer this question. There has been a great deal of debate in this Congress about age limits for pilots. How many over-age-60 pilots are used in the commuter industry? Do accidents like the one last year in Maine suggest that pilot age limits are a safety issue in commuter operations? Should there be an age limit for commuter pilots? How much of a burden would that create?

Mr. HOWE. In the case of Rio, we have two pilots presently operating under waivers; one is 62, and one is 61. I am one of those people or because I have reached the senior citizen status myself. I am one who thinks that the calendar does not determine your age, really; it is your condition, your physical, and so forth. And I personally feel that the 60 standard is all right, but I think there should be the ability to waiver that when the person you are getting the waiver for is physically capable of meeting all the requirements for operating an aircraft.

Now, where and how you draw the line, I do not know. But both of these fellows who are over 60 in our organization are retired military men, and they are both physically very fit, and they have to meet the same physical standards and so forth as every other pilot. I see no reason why, if a man is in that shape, he should not be able to fly beyond that.

I think we deprive ourselves of some valuable talent.

Mr. FARY. Would any of you other gentlemen wish to comment on that?

Mr. CONNELL. Our chief pilot is a retired military officer who is 62 years old, with over 24,000 hours, of which about 4,000 to 5,000 are in type and model of this particular airplane that we are flying. He is six-foot-two and-a-half, in beautiful shape, and I concur with Mr. Howe, that the calendar should not make the

determination, and it should be physical examination. There is an awful lot of talent there, in that one individual.

Mr. CRABTREE. I am going to take an adversary position, gentlemen.

I have to concur that the chronological age may not be the criteria, but what else have we got available? If we make a judgment on individual health, I have seen nothing that verifies that anything we have available in medical science today is going to assure me when I put the pilot in the cockpit that he is not going to have a heart attack or some other disabling illness.

There has been a lot of testimony on the deleterious effect of aging as it relates to pilots. I do not know what that age is. The FAA has established an age of 60 as a guideline and as a maximum, and I am fully in support that there should be a standard established. What that standard is, is arbitrary. It is arbitrary to say that I have got to have 45 minutes of fuel for a reserve, but it is a standard. We have to draw the line someplace.

And I am not saying that I know or am qualified to say that age 60 is the age. It may be 55, or it may be 70. But I really feel that there should be a standard set.

Mr. FERRUCCI. Ransome agrees with Mr. Crabtree.

Mr. FARY. Mr. Howe, what followup has to be done to insure that the over-60 pilots are not becoming less effective in handling duties as a pilot?

Mr. HOWE. Well, in our case, I have talked to our two fellows about it, and they would have no objection if they were required to have physicals every 3 months, and take whatever tests anybody wants to give them. They are willing to prove themselves whenever the proper authorities demand, that they are physically and mentally capable of handling their job.

And I am not at issue with Mr. Crabtree at all, because I think there has to be some standard. I think there are some places you have got to start looking at a guy. Perhaps 60 is fine, and maybe we should look at them every 3 months, or something like that. I do not say that there should not be a standard. I just say that there should not be an arbitrary, irrevocable cutoff at 60 years old, because when you reach 60—I am 62 now, almost 63, and I do not think I have gotten old yet.

Mr. FARY. Well, frequent physicals are probably not the answer, and I guess this study that will be conducted soon, or is underway now, at the National Institute will help to solve that problem or throw some light on it.

How often do you observe FAA inspectors checking on your operations? Do they ever fly your entire route system with you?

Mr. CRABTREE. In Golden West's case, we are frequently visited by the FAA—I think I can probably strike an average of three times weekly we have an inspector either on the premises or on the line, actually observing our operations not only in the aircraft, but also conducting inspections of the stations in our route system.

Mr. FARY. They do fly the entire route?

Mr. CRABTREE. Yes, sir.

Mr. FARY. What procedures do you have in effect which will satisfy you that the maintenance personnel are apprised of FAA

rectives or manufacturers 'service bulletins which may be issued
lative to equipment which you operate?
Mr. CRABTREE. Are you speaking from a point of communication?
am not sure I understand the question. The internal communica-
on that gets this information to the individual that is working
ith the aircraft?
Mr. FARY. Yes.
Mr. CRABTREE. The system. The regulation that we are currently
erating under, the new part 135, is in fact part 121 maintenance,
d the system established, the organization established by that
gulation and the systems that the operator must establish pro-
des for that. You have to establish in your manuals a procedure
disseminating this information and having check and balance
ithin the organization with inspectors and/or licensed mechanics,
d the director of maintenance having responsibility for it.
So there is a system established under the existing regulation.
Mr. FARY. Do you have someone in your company who has the
sponsibility for supervision of maintenance?
Mr. HOWE. We have a vice president of maintenance who super-
ses our maintenance department. Under him, we have other
sistants who supervise various areas of maintenance. Then, the
erall supervision of the department comes under a senior vice
esident, the reason being, as anybody who has been around avi-
ion knows, you have a tug constantly between maintenance and
lots, as to who does what and why. So we have one man oversee-
g both departments, and then a top man over both the flight
partment and the maintenance department.
Mr. FERRUCCI. In Ransome's case, the FAA requires in FAA part
a chief inspector and a superintendent of maintenance, and also
ells out the experience levels that these people have to meet in
der to hold the position.
So in Ransome's case, we have the FAA-required supervisory
rsonnel, and then we have a director of maintenance, which is
er and above those people, and is not required. Then, they all in
rn report to me as the vice president.
Mr. FARY. Have any of you ever taken disciplinary action against
lots or against mechanics, and for what reasons?
Mr. FERRUCCI. I discharged a pilot for lack of competence, and
ound up in a very lengthy discrimination suit. But yes, we have.
Mr. HOWE. I discharged one last week; his weight and balance
as wrong. His airplane went out over gross.
Mr. CONNELL. We have discharged for the same reason.
Mr. CRABTREE. We have, too. That is a rather broad question, and
assume you mean for any reason.
Mr. FARY. Primarily for safety reasons.
Mr. CRABTREE. Yes, definitely. That is one of the principal things
at we are faced with in disciplinary action.
Mr. FARY. Thank you very much, gentlemen. I yield back the
lance of my time.
Mr. MINETA. Thank you, Mr. Fary.
Mr. Royer.
Mr. ROYER. Yes, Mr. Chairman. I just have one other question I
anted to ask, and I know the gentleman from California will be
llowing up on it.

Mr. Ferrucci, you brought 19 binders here for a purpose, I assume.

Mr. MINETA. We cannot see you. We hear you, but we cannot see you. [Laughter.]

Mr. ROYER. Are you trying to tell us that there are too many of them, that there is duplication in there, or that we need some more, or that we need less; what are they here for?

Mr. FERRUCCI. They are here to tell you that we do not need more regulations. That is how many binders it took to comply with the ones that are on the books now. We do not need anymore regulation.

Mr. ROYER. Did you make any indication, though, that these could be condensed into something less than that?

Mr. FERRUCCI. I am sure they could. As I said earlier, we operate under three separate statutes. If we could operate under one statute, the number of books would go down.

Mr. ROYER. What about the agency? Just the one agency that overviews the 19?

Mr. FERRUCCI. It is all FAA.

Mr. ROYER. Thank you, Mr. Chairman. I yield back the balance of my time.

Mr. MINETA. What are the three that you are referring to, Mr. Ferrucci?

Mr. FERRUCCI. We operate under 135, 121 supplemental, and 121 domestic. And there are some major differences between domestic and supplemental in crew duty time, dispatchers versus flight followers, types of radio equipment that you have to have. There are some noticeable differences.

Mr. MINETA. Thank you.

Mr. Goldwater.

Mr. GOLDWATER. Thank you, Mr. Chairman.

Gentlemen, I would join with my colleagues in thanking you for being here today and taking the time off from operating your airlines to perhaps shed some light for the Congress on some of the problems that you have been having.

I am not sure just what may come out of these hearings, but certainly, the Congress and particularly the members of this subcommittee, are very much interested in aviation and in doing what we can, from both an economic and a safety standpoint. Mr. King and I had some conversations about this. At that time, Mr. King did not feel that we were a safe industry; he was not quite sure what we were. And now—I did not hear him here yesterday, but I have talked with him personally, and he now agrees that we have a responsible industry; we do have some problems, we do have some operators, perhaps, that need discipline, that need whatever they need.

But I think that is an advantage of all this, because this is the first time that the carriers and their representatives have had a public forum in which they could tell you exactly what they do, how they do it, and that they are not a bunch of "Johnny-come-lately's." Some of us—I have been around since 1943, and others have been around for varying periods of time and have operated all kinds of equipment, all kinds of airlines. We do know what we are doing, and we do know where we are going.

And these hearings, while on occasion it seems onerous to me when I have to come to Washington 3 times in 6 weeks, are of great value to us. And I, for one, both as an operator of an airline and a representative of the commuter industry, appreciate the opportunity to tell our story, and I think it is coming across.

Mr. CRABTREE. I share that view. It is onerous. We are not rich, by any means, in our management. We are not topheavy in management, and for me or any of my people to come to Washington frequently, in a short period of time, does put a burden on the carrier. But I agree wholeheartedly with Pete, that it is necessary. It was evident from the beginning that there was a requirement for dialog, and there were some questions that had to be answered, and I am glad you guys asked us.

Mr. GOLDWATER. I have noticed that in just a period of 1 year, 1978 to 1979, we have seen about an 18-percent growth rate in passenger miles in the commuter business, a significant growth.

At the same time, we have also witnessed, in a 7-month period of 1978, where 22 people were killed in 5 accidents, versus the same 7 months of 1979, where we had 48 people killed in 10 accidents. This is a significant growth in accidents in a period of 1 year, and is perhaps the driving force behind the concern of the Congress and various agencies of Government as well as the traveling public.

And what you are saying is that you look upon this opportunity to shed some light on this. The question, I think, straight out, is why do you think there has been an increase in commuter accidents—why is it seemingly worse than the scheduled airlines?

Mr. HOWE. Well, as I said earlier, I do not know that it is worse. But I must say, Mr. Goldwater, that I cannot speak for why, with regard to any particular carrier or anything else. There is only one carrier that I can speak about. And it is my feeling that if all carriers in the industry operate as Rio operates, and as I know these guys here, sitting with me, operate, as I know a lot of others operate, you would not have any question as to our safety record.

I cannot tell you why there are more crashes or whatever; I just do not know. I have only one concern, and that is Rio Airways and the way Rio operates. And I know that if everyone operates as Rio operates, which is within requirements as to maintenance, as to personnel, as to equipment and everything else, which are far in excess of the minimum requirements of the regulatory agencies, we will have no problem.

Mr. GOLDWATER. Mr. Connell.

Mr. CONNELL. Our record for both periods is zero. I really cannot speak for the other carriers.

Mr. GOLDWATER. Well, what is there that is so unique about your operations that you seemingly have a worse safety record as a whole industry versus other forms of aviation transportation?

Mr. CONNELL. Well, I really cannot speak to the whole industry. I can really only speak for Colgan Airways.

Mr. GOLDWATER. But you must have some observations; you do not operate in some kind of a black box. You are seeing what is going on around you. You must talk to the people.

Mr. CONNELL. Our management policies give first priority to safety. We have flight managers, not required; we have higher than minimum standards, not required. We do not make a lot of

money, but we pour our money back into maintenance and the things that are necessary.

Again, I am sorry, I just cannot speak for the other people.

Mr. GOLDWATER. Mr. Adcock, do you have any observations as to why the safety record has a dramatic increase in accidents?

Mr. ADCOCK. Not beyond the scope of what Mr. Howe indicated. We can only oversee and reflect on our own operations. However, we do certainly share your concern with the industry image.

If this industry is to achieve the potential that it has to serve the public properly and to develop an air transportation system, each one of us must be vitally concerned with what our neighbor is doing, and we certainly do share that. And the definition of what is a good operator and what is a bad operator is certainly very difficult to come by, but as the FAA personnel stated during the NTSB hearing—I do not think these were their words, and I believe this came from some of the CAB personnel—but it is very similar to pornography in a lot of areas, where it is real difficult to define, but you definitely know it when you see it.

Mr. GOLDWATER. Well, Mr. King yesterday pointed out that commuter operations have an accident rate of six times higher than certificated airlines. Why is this? So far, nobody has answered this question. You have all talked about your own operations. That is not the question. You are part of a particular industry that is under attack right now, and the traveling public are questioning whether you are safe or not, and the Government is questioning whether you are safe. I want to know why.

What is so unique about your operations that is causing this rate of six times what the certificated airlines have?

Mr. ADCOCK. Well, the statistical mix certainly has to have something to do with it. We are dealing with 150, 200, and 300, depending on how you define the commuter operators, and we are dealing with maybe 20 trunk and regional carriers. And the size of our operations, on the other end. We have a tremendously larger sampling that we are dealing with, but the number of operations in itself is much smaller. So certainly, one accident and several fatalities are going to stand out much more in that sampling.

I think that the statistical distortion that Mr. Howe is referring to is real. It is difficult to set down exactly how we might go about better defining it, except to understand the nature of our industry, dealing with a different statistical sample at both ends in the trunk and regional carriers.

Mr. GOLDWATER. Well, these figures were reduced down to departures, so that you are comparing apples and apples, and you come up with——

Mr. ADCOCK. But in fact, are we. For the most part, trunk and regional carriers are a similar mix of management policies and operations, and what we are discussing here is that there is some recognition that all 135 operators do not operate exactly in the same manner, do not have the same degree of FAA participation in their operations.

So we are assessing an industry and in the only tools that we have to assess it, the statistics that we do have.

Mr. CRABTREE. I might add to that that if we accept that the safety record is worse—assuming we accept that—there are so

many factors that go into the operation, differences between commuter operation and the regional trunks—you say well, it is analyzed on an equivalent basis, because they analyze both on the basis of departures. I do not know if that is an equivalent base. I do not know if you can derive a hard and fast answer that yes, we are less safe, or no, we are not less safe.

There is a volatility factor in any accident statistics. If you look at our last 6 months, the record is extremely good; probably in comparison to previous years, it is much, much better. So where are we drawing the baseline to come up with this conclusion that the commuters are less safe.

The accountability for the new FAR is something that has not really been given a chance to see the effect on the safety record of the commuter airlines. That regulation only became effective realistically to the commuters just in recent months. Even prior to that, in the latter part of 1979, the record was very good.

Mr. GOLDWATER. Do you see this as a result of the transition period, a growing period, vis-a-vis no regulation to new enforcement, sort of a threshing-out period?

Mr. CRABTREE. I am confident that the regulation is going to have a positive effect on those operators that require that kind of regulation.

Mr. GOLDWATER. We have not really seen that yet.

Mr. CRABTREE. No; you have not. We have not had an opportunity to see that, no, sir.

Mr. FERRUCCI. I would like to suggest that I think it is unfair to ask we as individual companies to tell you or the FAA what is wrong with the industry.

Everyone at this table has an excellent safety record, and we operate from a single-engine airplane up to a 50-passenger, 4-engine turboprop.

Somebody on Mr. King's staff or somebody on Mr. Bond's staff should look and see how we have done it since 1977, and he is the guy who is privy to this information. When he went to an accident what did he find that that guy was doing or not doing, that I am doing. I do not have that information. So he should be able to come around and visit us. We would be glad to welcome him at Ransome. He can look my operation over and then tell me why somebody else had a crash. He did something, they did not do the weight and balance, they did not keep their records, they kept dual logbooks, or whatever it is that they do, and now you have got your finger on the heart of the problem.

Mr. GOLDWATER. Gentlemen, it just seems to me that you would be concerned about the image of this industry that you are part of.

Mr. CRABTREE. We are.

Mr. ADCOCK. No question about it.

Mr. GOLDWATER. I am very much concerned about the image of the U.S. Congress, and when we somehow get one "bad apple", it tends to reflect on all the "good apple", and I as a "good apple" am concerned about that.

And you, having good records and putting a lot of effort into running a good airline, should be concerned about the image of your industry.

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And it seems to me that it is not an unreasonable question to ask people who are actually involved in that industry to have some thoughts on why the safety record appears, anyway, to be worse.

I mean, is the atmosphere in which you operate different than, say, for instance, the scheduled airlines; do you make more takeoffs and landings than they do? Do you operate at more altitude than they? Is the atmosphere more dangerous because you are operating at below 10,000 feet in general aviation uncontrolled airspace? That is what I am asking. Is there too much regulation? Are you forced, from an economic standpoint, to take shortcuts to comply with regulations, and putting your dollars not into safety but into something else?

Mr. FERRUCCI. Well, the answer to all the above is yes, in Ransome's case, and yet, we still have a safe, profitable, fast-growing operation.

So you can operate in that environment successfully. And I am not privy to what the investigation board finds when they go out to an accident, as to why this particular carrier had the problem.

Mr. HOWE. I would also, Mr. Goldwater, like to address your question as to our interest as far as the industry is concerned.

I am damned sure interested, because everything that impugns the integrity or the ability of the commuter industry in some way affects me. And it makes it doubly hard to take because you know that your operation is one that should not be penalized by someone else's lack of handling a situation in a proper manner.

That is why all of us have taken on the duty of appearing wherever somebody will ask us to appear and tell about it. I worry, too, because I run into it a lot. People will say, "How do I know, when I look at the Official Airline Guide, that Rio is a good operator, and X commuter is not a good operator?"

I can only answer by saying that if they abide by all the regulations and do everything that they are supposed to do, they are all good operators. But I have no way of knowing those that do not, except when they get into trouble.

Mr. GOLDWATER. In regard to regulations, in my opening statement, I addressed myself to that, and I passed out a list of new and proposed rules and regulations for your industry.

I also underscored the fact that the accident rate appears to be up, that perhaps the FAA is not doing an adequate job in enforcing the regulations that already exist, that maybe not new regulations are needed, but enforcement of the ones that are already on the books.

I would like to give you an opportunity to address yourselves to this whole question of regulation by the FAA. I think you have made some suggestions in that regard, I think, in the discussion about the difference in interpretation of regulations from one GADO to another, and therein would be the recommendation that there be some kind of a clearinghouse, standardization office. That is a good, positive recommendation.

I think the committee is looking for some other recommendations that we can then have and discuss with the FAA when they come to talk with us. Are there others that you would suggest as far as how to handle these regulations, if there is too much—Mr. Crabtree, you were mentioning that you got the regulation before

the FAA inspector did. That would bring to mind that perhaps their communication system somehow needs to be better aligned so that their inspectors and their personnel are preinformed of these and are familiar with them and have an opportunity to bring them through the FAA before they come out to enforce them.

Are there others that we should know about, as far as the regulatory process is concerned? Are there too many regulations? Are they getting into areas that should be discretionary or flexible?

Mr. HOWE. Well, looking down the list that you have attached to your statement, Mr. Goldwater, there are two items on there—the others, in terms of application as far as Rio is concerned, and I think as far as the industry is concerned, we do not have too much problem with though the others may have different feelings, but there are two that I would like to address myself to.

One is No. 3, the "get tough" policy. A get-tough policy in and of itself is of little or no value as far as I am concerned. And I happened to be in Abilene, Tex., a week ago last Saturday and made a speech to a group of airport operators out there, and the luncheon speaker was a man from the FAA, the Fort Worth GADO, and he started off his luncheon speech by bragging about the fact that he had fined Braniff Airways $3 million, and he had fined American Airlines $500,000, and American Airlines had paid the $500,000 without protest. That was his introduction to his speech about the FAA.

That kind of a get-tough policy to me means little. I have found in my years that people who get tough with me only cause me to bristle, and we have problems.

I think that this get-tough policy should not be the guiding force with the FAA. I think we should get back to what we talked about earlier here; it should be a matter of cooperation, work with the carriers and develop it.

The idea, as I understand any regulatory agency, is not to fine people, to catch people, or anything else, but to provide a climate in which you meet all of the requirements that are necessary for a safe and sane operation.

I just feel this get-tough policy is a publicity gimmick or whatever, an attention-getting gimmick, to cover up some other things.

Mr. GOLDWATER. It does not encourage the cooperation is what you are saying.

Mr. HOWE. It sure does not.

Mr. GOLDWATER. I think Mr. Connell mentioned the same thing; some of them are like policemen.

Mr. HOWE. That is right.

Mr. GOLDWATER. And conducting witch hunts turns people off from a cooperative kind of attitude.

Mr. HOWE. The other thing I would like to comment on is No. 5, proposed airport security rules.

I do not know how much any of you gentlemen have looked into what the FAA is talking about when they talk about imposing all these security regulations on us.

But our commuter organization here in Washington has taken a run of all the carriers to get estimates as to what it would cost us if they impose on us all the security regulations that are required of

the CAB 121 carriers now, and it is somewhere in the neighborhood of $20 million. And I am not sure we have all of them.

I know, in the case of Rio Airways, that the cost would be about half of our net profit each year—that is, what we made last year—just to get going on it.

And it is so silly. It is ludicrous, from the simple reason that—and I am very superstitious, and I hate to talk about these things because something may happen—but if you look at the record, there have been five hijackings of record in small aircraft. They were all single-engine aircraft. They all happened either in the Florida area or in the Caribbean area at a time in the 1970's when the Cuban situation was the cause of most of it.

There has not been a single injury, there has not been a single fatality. There has not been any reason at all. There is no demand by the carriers. But under the guise of safety—and I fail to see how they get safety involved in this—they want to impose on us all of the security regulations that the large carriers now handle.

Now, I can tell you in the case of Rio Airways, it would amount to somewhere, the best we can figure, somewhere between $1.35 and $2.35 a passenger is what it would cost. And there is only one person who can pay it, because I am sure not going to pay it, and that is going to be the passenger in his ticket. And already we are seeing resistance to price in terms of tickets. The discretionary market is softening, and the discretionary market in the airline business is the profitable portion of the market. The businessman pays the expenses. The profit is the discretionary traveler, the family, the vacation traveler, and so forth, and we are seeing resistance.

Fuel has run our costs up. I have had 11 cents in the last 9 weeks; 11 cents a gallon increase from our suppliers, 3, 3, 2, and 3 cents per gallon.

To add to all of the things which we cannot do anything about—that is fuel, primarily, and to other costs which are going up—to put on us an unnecessary regulation as to security—I will tell you very frankly what it can result in. It can result in the loss of air service to a lot of these smaller cities, because you take a city that boards 500 a month, and you tack on a great, big, high security cost. It could mean the difference between some carrier serving that and not serving it, because if he raises his prices, which may result in a $5 or $10 per ticket increase just to meet these costs, which are the same whether you board 5 in a city or whether you board 5,000——

Mr. GOLDWATER. We have a time situation here. I wonder whether somebody else has a comment.

Mr. Ferrucci?

Mr. FERRUCCI. Well, Ransome strongly supports the new part 135. We believe that that basic regulation can provide the guidance and will give the industry a safe operation. It has to be enforced, and it should not be enforced with a heavy hand.

I concur with Mr. Howe, that you are going to get a lot more cooperation if you come into an operator's facility—and it is very laughable in the industry when they say, "We are here to help you". But if they come in and say that and genuinely mean it, I

think that the operator and the FAA using the 135 will give you a safe operation. I think everything is in there.

Of course, we operate under that, and we also operate under 121, which is more restrictive. I am not sure that it is safer, but it is certainly more restrictive.

In Ransome's case, speaking only for Ransome, we would have no problems operating under 121.

The security issue that Mr. Howe addresses, Ransome screens everything. But I concur, looking at it from an industry standpoint, his points are very valid. It is not a valid issue with Ransome.

Mr. CRABTREE. From Golden West's standpoint, it is a very valid issue, and I would only echo Mr. Howe's comments on the security regulation. It is not only unnecessary, I think it is idiocy on someone's part.

Your point on the new part 135, I will fortify what the other two gentlemen have said. I think the rulemaking process that went before the implementation of part 135, the new 135, was an example of what can be done with industry and the agency working together in developing a regulation without the flaws. Granted, it took a while. But the end product was as close to a perfect product for regulating this industry than anything we have ever seen before within any other industry.

The get-tough policy, I am going to echo what Mr. Howe said and add to that that the success of Golden West Airlines, the procedures that we have established, the integrity of our operation, has greatly been enhanced by the cooperative effort and the constructive attitudes that have prevailed with our FAA inspectors.

Departing from that, I am seeing a trend toward the police type of an agency rather than coming to us and giving us guidance and sharing experiences that they are seeing with other operators.

We are seeing an enforcement attitude rather than a surveillance and constructive dialog, and I believe that that is a direct result of edicts passed down by the Administrator in his new get-tough policy.

That is not to say that a get-tough policy was not required in some areas, but I think it is starting to get out-of-hand.

Mr. CONNELL. Even at the risk of sounding like a broken record, I concur with what these gentlemen have said, but I would like to say one thing. Again, it sounds like a broken record, probably. But our particular region, the Washington FISDO, is different from, I think, most of the others. They only have one commuter, and that is us, and they have a tremendous amount of general aviation. We have never had an air carrier principal or inspector, period, that has come out and worked with us until very, very recently, and he was a principal inspector with air carrier background.

We have noted a change, a sharpening of their understanding of our situation since he has been onboard. I cannot overemphasize the police attitude, because it really turns people off. It definitely closes up lines of communication.

Mr. GOLDWATER. Mr. Adcock.

Mr. ADCOCK. I think it has been pretty well covered. I think we have an adequate regulatory framework to work within, and we need to improve administration of it.

Mr. GOLDWATER. Well, listening to all you guys, it seems everything is fine with your operation. You have no complaints at all as far as—except for the two that Mr. Howe mentioned. So obviously there is no reason to hold these hearings. Everything is fine and dandy, as the accident rates go up.

Mr. Chairman, I have further questions, but I will yield.

Mr. MINETA. Thank you, Mr. Goldwater.

On this list, you also have the CVR and the FDR, the cockpit voice recorder and the flight data recorder. Do you have any thoughts about that requirement?

Mr. FERRUCCI. This can be a very heavy economic burden on a small carrier. Prior to the change of the rules, Ransome had this in all its fleet. We currently only have it in the Dash-7.

If we had to go back and retrofit and run a fleet of 15, I suspect that the annual maintenance cost would be around $100,000.

I think if the requirements is there for voice recorders and flight recorders—and I am not too sure that it is—I do not think anybody has convinced me yet that it has ever prevented an accident. It is a great tool for the accident investigator to go back to, but it normally does not prevent the next guy from having that type of accident.

But if they are proven to be of a necessity, then I think that we ought to have the industry come up with one that the maintenance and the cost of the thing is not so prohibitive, particularly for the small operator.

In Ransome's case, we obviously could stand this, but for somebody with a fleet of two airplanes, it could be a very burdensome requirement.

Mr. MINETA. Much publicity has been given recently to the need for more landing aids at those airports utilized by commuters, with the allegation being made that such airports are considerably more dangerous than others which have more sophisticated equipment.

Testimony given to the subcommittee to date indicates that the more frequent cause of accidents is failure to maintain aircraft in either pilot error or poor weight and balance control, but none have been attributed to the lack of more NAVAIDS. I am just wondering if any of you would like to comment on that.

Mr. HOWE. Well, in our case, we only operate in one airport that is not controlled, and our primary thing there is just the lack of reliability of service in weather there. We just do not operate into it. I would like to see it in Killeen, which is the one we do not have. But we just do not take any chances on it. We just do not use it.

Mr. MINETA. In a case like that, who makes that decision?

Mr. HOWE. We do.

Mr. MINETA. Do you have a dispatcher?

Mr. HOWE. We have what we call a flight-following system, yes, sir, and they make the decision at Killeen.

Mr. MINETA. Have you ever had a pilot bust those minimums?

Mr. HOWE. To my knowledge, no.

Mr. MINETA. Just out of curiosity, if you had knowledge of a pilot that busted the minimums, what would you do?

Mr. HOWE. He would be an ex-Rio pilot.

Mr. MINETA. Is that the case with the others; if you have the established minimums that someone busted, they would be an ex-employee of the company?

Mr. CONNELL. Definitely.

Mr. FERRUCCI. We also only have one station without a glide-slope; they all have ILS.

Mr. MINETA. What about some of the other carriers, where you are not operating into airports with an ILS?

Mr. CONNELL. Our home station does not have an ILS, sir. We have certified weather observers. We do not have the FAA take the weather observations for us. We have certified weather observers.

This does interrupt our regular schedule. There are a lot of times where, because minimums are below passenger-carrying limits, we have to bus passengers to the next station and fly the plane over empty. It does disrupt our schedule, but you are talking about safety, and I think it is primarily management responsibility, the character and the moral fiber of management, that determines the level of safety. And in our organization, you just do not bust minimums. You bus people to the next station. You lose some passengers that way, but you are still operating safely.

Mr. CRABTREE. We make comparisons of safety records—and that is what all of this is all about—and I have maintained and continue to maintain that my passengers are just as important as United Airlines passengers, and any airport I am operating out of should have the same benefit of NAVAIDS, lighting systems and facilities that would be afforded to a scheduled, certificated carrier.

We are operating in three airports that are not ILS-equipped. You can fly your aircraft down to the minimums and make a missed approach.

The point here, gentlemen, is that the ILS approach is considered by pilots, by industry, to be a level of safety and a standard for air transportation passengers. And I do not think we should be taking a back seat and flying our airplanes into anything less than that standard.

Mr. GOLDWATER. Are you?

Mr. CRABTREE. Am I. We are, yes. Sure, we are.

Mr. GOLDWATER. Two-thirds of the airports that the commuter industry serves do not have instrument landing systems. Only one-third of those airports that are served by scheduled, certificated airlines, only one-third do not have them.

Does that concern you?

Mr. HOWE. Well, it has concerned the industry. It is one of the things that we have been trying to get done in our industry, as you know. We have fought up here on the Hill to get the ADAP funds to include the commuter airports.

For example, it seems ludicrous to me to have Killeen, Tex., which carries about three times as many passengers in and out, a year, as does Temple, 12 miles away, and Temple has a fully instrumented airport, simply because Texas International used to operate into it. We carry 35,000 passengers in and out of there and over 100,000 in and out of Killeen, and Killeen is not instrumented. We do not understand that.

Mr. MINETA. Mr. Goldwater.

Mr. GOLDWATER. Thank you, Mr. Chairman.

Are any of the FAA inspectors that you deal with generally knowledgeable and well trained in commuter operation and maintenance?

Mr. FERRUCCI. Are you asking are they, or are they not?

Mr. GOLDWATER. Are they generally well trained and knowledgeable on commuter operation.

Mr. FERRUCCI. In our case, they are. In fact, they have all attended our schools, and for the operational types, we have training contracts with FAA, Oklahoma City, and they get their flight training and everything else in our aircraft.

Mr. CRABTREE. In our case, on the operations side, yes, I think they are adequately trained for surveillance of flight operations. On the maintenance side of the house, I think there is room for improvement.

Mr. GOLDWATER. Are there any examples that you can give where a poorly trained FAA inspector or one that lacked knowledge had a negative effect on your operation?

Mr. CRABTREE. I can cite something that prevails on a continuous basis, the amount of time that the operator may have to spend, in our case specifically, in providing background information on an airworthiness item for a particular airplane; whereas it is felt that that it is the agency's responsibility to have that man adequately trained to make a judgment without a lot of time spent in background information, and indoctrination on a particular type of operation or the particular type of aircraft.

Mr. GOLDWATER. If there are too many inspectors, they get in the way; if there are too few, they cause delay. I am wondering if any of you can give us an example of where these two situations may have occurred in your business or in the industry as a whole.

Mr. CONNELL. Mr. Goldwater, from time to time, inasmuch as there has not been as much priority on the commuter industry in our particular FISDO, since we are the only commuter there, again, more about general aviation, there are times when we need a flight check that they have not been able to respond to our needs. With continued discussion and emphasis on that one point, they have increased their availability considerably—very recently. But in the past, there have been delays of a week or two before you get a flight check, which delayed your implementing additional routes.

I think that is now a thing of the past in our particular case.

Mr. GOLDWATER. You are seeing improvement.

Mr. CONNELL. Yes, sir, I am.

Mr. GOLDWATER. I want to get back to what the chairman was talking about, instrument landing systems, equipment or services by the air traffic control system.

Many of you operate below 10,000 feet in very dense atmosphere. I do not believe there are too many more densely populated atmospheres than the Los Angeles basin, where Golden West operates.

I am sure that Ransome also has the same kinds of experiences up and down the east coast.

There is the increased threat of midair collisions at this altitude, in somewhat uncontrolled airspace that you fly.

Two potential solutions to this potential problem would be more TCA's or a collision avoidance system. I am wondering what you

feel about the prospects of more TCA's and more controlled airspace as far as the airspace that you are flying in.

Mr. CRABTREE. The industry has taken a position on this through our representative, the CAAA, and I am sure we can have that entered into the record. I might point that out just so that we have it on the record that we have an industry position that is formulated collectively.

Mr. GOLDWATER. Do you see this as a problem, operating in this particular atmosphere below 10,000 feet in uncontrolled airspace?

Mr. FERRUCCI. Well, in Ransome's case, again, we are in TCA's—Washington, Andrews, Baltimore, Philadelphia, McGuire, New York—we are in TCA's all day long.

Mr. GOLDWATER. Do your pilots ever experience any trouble with air traffic control systems?

Mr. FERRUCCI. We experience delays, obviously, in New York, and to some extent in Washington. So there is some work that could be done on improving the system, I believe. It appears that you experience the worst delays when the weather is VFR.

Mr. GOLDWATER. Do your pilots ever complain of preferential treatment to scheduled, certificated air carriers, or treat them as less than important?

Mr. FERRUCCI. Maybe an isolated case, but I think that is just an individual pilot. We really do not have that problem.

Mr. CRABTREE. I would say the same thing. In all the airports that we are operating, I think our operating flexibility or control is equal to the scheduled, certificated air carriers.

Mr. GOLDWATER. You get equal treatment.

Mr. CRABTREE. Yes, sir.

Mr. HOWE. In our case, at Dallas-Fort Worth, we sometimes get preferential treatment. They will ask us if we can get in behind that jet that is landing, and get going quickly, and dump her over and go. In the case of takeoff, they give us intersection takeoff. We also have a stone runway that we can use.

Mr. FERRUCCI. That is true for Ransome. If anything, we get preferential treatment.

Mr. GOLDWATER. You all operate under IFR rules, I assume, in most of your operations.

Mr. FERRUCCI. The only part of my operation that is required to be IFR is the domestic, which is the Dash-7 four-engine. The Nord aircraft under supplemental, we can operate under VFR, and if it is VFR, it is the captain's choice, and they do exercise it.

Mr. GOLDWATER. I assume your pilots under VFR would request surveillance?

Mr. FERRUCCI. Yes. That is company policy. They must request radar vectors and radar traffic information as they go through—of course, they are going through TCA's, so you cannot just go blundering through.

Mr. GOLDWATER. There are no complaints about getting adequate service in that area?

Mr. FERRUCCI. The primary reason for filing VFR is to eliminate the delays at takeoff because the New York center's computer is saturated or down or whatever. You can take a VFR and go, and once you are in the air, you are actually going from TCA to TCA, so the surveillance is about the same.

Mr. CRABTREE. Although that is a factor with Golden West Airlines, in the area that we are operating, it is our company's position that filing and flying an IFR route is less safe because of the congestion on the airways, the concentration around VOR's, check points, intersections, and we heavily support and advocate that our pilots file and fly a VFR route. And we have prescribed routes, and we also require the radar surveillance.

Mr. CONNELL. We do not operate in TCA's. Our existing routes do not go into TCA's at the present time. We do have one area—Poughkeepsie, N.Y.—which is up in the Northeast corridor, that is very minimal on radar coverage. We experience continually many delays IFR-wise, because of that minimal radar coverage.

The eastern region has spoken to that, recognizing it has a problem, and they are working on it.

Mr. GOLDWATER. I think Ransome is experimenting with or has been pioneering in the area of navigation, and I understand that the Dash-7 is offering RNAV capability as an option—I just happened to get that out of an advertisement in "Aviation Week."

I am wondering how you find the RNAV approach to navigation works in your operation?

Mr. FERRUCCI. Unfortunately, we are not doing it on a revenue basis. The prototype aircraft performed admirably, and we have the production boxes 1, 2, 3, and 4. The prototype was a breadboard.

We are having trouble with the production boxes. I think these are minor engineering technical problems, but JETS, the manufacturer, and DeHavilland, have not been able to sort these out.

We attempted to start operation in January, and it came to our attention when we went down on the training flights that the gear really was not working as well as the prototype. The prototype gear is not just an RNAV, it is an approach. It is a three-dimensional approach in which the aircraft creates its own flight path, its own angle of attack, or glideslope. And of course, we are endeavoring to use the stub runways at Washington National and at Philadelphia, to increase the capacity of the airport and, of course, to cut down on the delays of us getting into the so-called daisy-chain, for instance, when they are using 36, there is daisy, and you go halfway to Richmond to get in line; we can come in and land on 33, which is 2,100 feet long, and stop and hold short of 36, or you can execute a missed approach and never cross the center line at 36. We have demonstrated this repeatedly to both the FAA and to Mr. King's organization.

We have great hopes that probably within the next 60 days, we will start to operate this on a revenue basis.

Mr. GOLDWATER. How cooperative has the FAA been with you in trying to perfect this?

Mr. FERRUCCI. We were very surprised, but they were very cooperative. It was a new concept, and quite frankly, we thought that they probably would have a closed approach to it. They surprised us; they did not. We have our own routes, our own discrete routes and approaches at both Philadelphia and Washington, and their cooperation has been excellent, once it was demonstrated to them that the airplane could do it.

Mr. GOLDWATER. Are any of the other operators looking at this?

Mr. CRABTREE. We have configured all four of our aircraft with the same system. In fact, our configuration was a duplicate of the Ransome configuration.

We have finalized proposed RNAV routes and access to San Diego and Santa Barbara. We have had initial meetings with the FAA operations side, the Air Carrier Branch, and the Air Traffic Control. I wish I could echo what Dave said on the cooperation. I am getting less than enthusiastic support right now, but I am not going to pass judgment until we get further into the program.

There seems to be an attitude of patronization right now, and there does not seem to be the enthusiasm that I have heard that Dave has seen with his people. But we have got a substantial investment in it, and we see it as a viable tool to increasing the efficiency of our operations and providing the flexibility in the airplane for the airport access and resolving some of the air traffic control problems that prevail in Los Angeles.

We see it as an asset to the system and as an asset to Golden West.

Mr. FERRUCCI. Hensen Aviation has also ordered Dash-7's with this equipment, and the intended use is Patrick Henry to Washington National.

Mr. GOLDWATER. Am I to assume that all of you agree that the airports that you serve, you would like to find more equipment like ILS's and VASI's and things like that?

Mr. CRABTREE. Yes, sir.

Mr. GOLDWATER. I would like you to consider the type of maintenance which perhaps caused the DC-10 crash in Chicago. Here, an individual airline adopted different maintenance procedures without sufficient scrutiny and the possible problems that that created. Does this type of problem occur in your industry?

Mr. CRABTREE. Could this type of problem occur?

Mr. GOLDWATER. Yes.

Mr. FERRUCCI. Well, No. 1, if the FAA had been doing their surveillance, it could not have happened. If the FAA would have actually been there, or if they were there and they saw that the procedure differed from the manufacturer, they could have stopped it.

You know, in all of these books here—some of them pertain to maintenance—it tells you exactly how you do everything, as far as pulling an engine, changing a prop, pulling an inspection. And of course, when the FAA comes down, he has a copy of all these manuals, too, and one of the reasons for his visits is to observe the maintenance force doing this type of work. And when we have got a new airplane, the Dash-7, they were there en masse every time we did any type of inspection for the first time, the first engine change, the first prop change, and it was to see if we did it in accordance with our manual, which is in accordance with the manufacturer.

So I do not think it can happen if, first, the operator does not try to deviate without going to somebody and seeing if the deviation is permissible, and second, if the FAA really surveils your procedures, if you do deviate, he should catch it.

Mr. CRABTREE. The same regulations apply. And I have to answer your question with a yes, it could happen if the surveillance is

exactly the same. I think it is really a question of surveillance, as are so many of the issues that we are talking about today.

Mr. GOLDWATER. Mr. Chairman, I do not have any further questions, but I would like to again thank you, gentlemen, for coming here today and underscore the fact that our interest is really genuine in trying to better understand your industry.

I happen to have been a big supporter of deregulation, and there was a concern about a lack of service to some of these outlying airports that required this service in an unprofitable way by certificated airlines, because I saw out there a very viable industry that could very well fill in the gaps and provide the service that others feared would not be there.

And there is a genuine interest in seeing that your industry as a whole have a high safety record and be treated with confidence by the flying public.

The U.S. Congress is different than the FAA, and it is different than the National Transportation Safety Board or the CAB. I think it is safe to say that we try to work with those other organizations in coming to a consensus on direction and policy, as well as funding levels, from the Federal Government's standpoint.

We do not handle the regulation of your industry, but we can, I think, have influence over the FAA and the CAB and other agencies if we perceive some problem, and I guess that is why the somewhat intense questioning, or giving you an opportunity to tell us what you perceive as problems.

I do not really perceive that you are having any great problem, from the testimony that you have given today, and I hope that perception is correct, because that is really what we are interested in finding out.

We want to know what problems exist, if any, so that we have the information available to us in order to question the FAA, or CAB, or NTSB, to try to get a reasonable approach to fixing the problem.

Whether it is too much regulation or too little; whether it is a get-tough policy that does not make sense, or a security problem that does not make sense, or a lack of cooperation in the air traffic control system—all of these things collectively can create an atmosphere which can destroy your ability to be a viable economic entity, filling in the gaps the certificated airlines perhaps have left.

So I would urge you, as you continue, to perhaps think about it, and communicate with us from time to time. I am sure you know that we are all sincerely interested in keeping as little regulation, as little government in your business as possible, because I personally feel that you are more efficient when you can operate in an atmosphere of freedom.

Thank you, Mr. Chairman.

Mr. MINETA. Thank you, Mr. Goldwater.

Mr. CRABTREE. Mr. Chairman, if I may, I would like to summarize some comments made. I think what we have seen on the panel is an overall attitude that the safety record is improving and that there is going to be a trend toward that improvement as a result of many of the things that have occurred over the past several months, primarily the new regulation.

And I would like to read into the record an industry position that fortifies that, if I may.

Mr. MINETA. Fine, Mr. Crabtree. Go ahead.

Mr. CRABTREE. This is the basis for our feeling that the record will continue to improve and the trend line will be positive.

On part 135, the industry is proud of the fact that it supported the upgrading of this important operating legislation governing commuters. Indeed, many of the provisions in the new part 135 were proposed by the commuter industry.

As of December 1, 1979, all U.S. commuter airlines were in full compliance with this regulation. Further, we are on record as supporting additional revision to part 135 as we gain experience with the rules and as the need may arise.

Second, as to FAA surveillance policies, again, the industry generally supported stepped-up surveillance of commuter airlines, which increases the frequency and thoroughness of the FAA monitoring function. We believe this program, if coupled with consistent regulatory interpretation by regional FAA offices and better communication between the industry and the FAA, will contribute to the elevated levels of safety we all desire.

Third, as to aircraft certification, the industry has vigorously pursued the development of a new light transport aircraft certification rule, proposed part 24. This new regulation will result in a new generation of light transport aircraft, designed to meet the air service needs of the American public under deregulation with improved safety, reliability and economy.

As to airport certification, the FAA is now reviewing rulemaking that would impose FAR part 139 airport certification on commuter service airports. Although the FAA has not yet published proposed regulations for industry review and comment, we would anticipate that the commuter airline industry will support reasonable requirements. Indeed, some 455 airports now served by commuter airlines are already part 135 certified.

As to air space regulation, the industry is in general agreement with FAA's overall policy of improving aircraft separation. Where there is potential high risk of midair collisions, the CAAA would support the rational development of terminal radar service areas or positive control air space.

However, in developing such air space policy, commuter airlines are concerned that the FAA will continue to take into account the impact on airport access and system capacity.

Finally, the industry has initiated several industry programs to assist commuter airlines achieve better operating reliability. These efforts include strengthening of communications between FAA and airline management; better coordination of airworthiness and maintenance programs between aircraft manufacturers and the airline operators of their products; and the establishment of an industry task force to review commuter airline pilot training and proficiency standards.

The Commuter Airline Association of America views each of these efforts as important elements in achieving an even better safety record. The cornerstone to current CAAA efforts, however, is and will continue to be passage of the post-1980 Airport-Airways legislation now pending before Congress.

Thank you.

Mr. MINETA. Thank you very much, Mr. Crabtree, for a very excellent statement in summary of the CAAA's position.

I would like to again reiterate the statements made by other members of the committee about your taking time from your own busy schedules to help enlighten our own subcommittee in these hearings.

We started with the NTSB; today we have you; tomorrow, we will have a panel of FAA inspectors, and then on Friday, we will have Mr. Bond from the FAA itself.

I think yesterday, we had a good foundation built, and today, in your testimony, we have had additional strengthening of that foundation as we continue these hearings.

So we would like to thank you very, very much for your appearance and your presentation in helping the committee understand your own problems in your industry, as well.

Thank you very much.

Mr. MINETA. At this time, I am pleased to ask our colleague, our very distinguished colleague from Alaska, Mr. Young, to come forward.

Mr. MINETA. Mr. Young, we are pleased to have you before our subcommittee. We have a copy of your statement, and the statement will be made a part of the record, and you may go ahead and proceed in your own fashion.

[The following was received for the record:]

STATEMENT OF HON. DON YOUNG (ALASKA)

Mr. Chairman, I appreciate the opportunity to testify today on the FAA's enforcement of F.A.R. 135 regulations in my own State of Alaska. I hail from what is quite simply the most aviation-oriented place on earth. In the lower 48, automobiles are the normal mode of transportation; in Alaska, we rely on aircraft. Having no appreciable system of roads, there are many villages where the same individuals who have never experienced a ride in an automobile have travelled extensively by aircraft. The distances are great, the weather conditions sometimes impossible, and the needs for air travel uniquely pressing.

Given the fact that air travel is by far the most common means of transportation in Alaska, I think it poignant that I address Alaska's relationship with the FAA in the hope that I can demonstrate a "worst case" application of the rules to the realities.

The FAA's primary duty is to regulate air travel ... that the best possible level of safety can be enjoyed by carriers and passengers alike. As a regulator in Alaska, it serves to facilitate consistent and safe travel, to teach operators ways to increase their levels of safety, and, in the event that non-compliance occurs, to take punitive action against those who do not live up to safety standards. The crime is that the FAA, for a number of reasons, seems to be derelict in its facilitating and teaching roles, and seems much more concerned with its punitive role.

As an ex-teacher, I realize that you don't rap a student on the knuckles for illiteracy before you teach him how to read. Yet, in a number of cases, this is precisely what happens. Carriers are fined for infractions they are not aware of, rules are broken because they are not understood, and worst of all, safety suffers because of the lack of understanding and the non-adherence by the carriers who point to "another FAA reg." Many rules which are fine for the lower 48 are ridiculous when applied to Alaska. The FAA must make the rules to fit the realities.

I've flown with many carriers in Alaska, some better than others. But in all my flying, I have yet to come across an operator who would jeopardize his business knowingly by not complying with a regulation he was shown was in his best interest. Yet, almost all perceive the FAA in a different light than he would like them to be perceived. The FAA is seen as having two sides: the first, as a proponent of largely unrealistic regulations with no realistic application to his operations, and

the second as an organization which is steadily declining in esteem due to a seeming lack of commitment to Alaska by the FAA office in Washington.

In the first case, the operator is confronted with an entirely new set of operating guidelines which alter the basic complexion of his operation. In Fairbanks, at the FAA General Aviation District Office, there are six operations inspectors and two maintenance inspectors to serve 1,720 aircraft, spread over an area of 320,000 square miles, or an area roughly the size of Texas and Michigan, combined.

At the same office, there is available only one copy of the new F.A.R. 135 regs., which is lent to whomever finds it interesting. Under these conditions, knowledge of, not to mention compliance with, the regulations is realistically impossible. Further, many of the regulations which apply well in the lower 48 do not apply in Alaska. Case in point, F.A.R. 135's requirements that pilots who operate multi-engine aircraft attain an air transport pilots rating is probably fine for 727 pilots in the lower 48. In Alaska, where costs for multi-engine aircraft run close to $300 per hour, and where the average A.T.P. rated pilot would be flying anything close to a 727, those rules do not address the realities.

The second view the average Alaskan operator has of the FAA, is that they seem to be quick to criticize the operator for violations of the rules, while all of the economic cues from Washington seem to indicate that the FAA itself is not concerned with safety in Alaska. I have personally seen the weather reporting for air travel purposes go from bad to worse during the last 20 years. Manned obeervations have been replaced with chronically-deficient remote systems, leaving flying treacherous, at best. The FAA's own personnel turn over at a rate of 30 percent per year in Alaska, directly due to a lack of sensitivity on the part of the Washington FAA to the personnel problems inherent in any high cost-of-living area. In addition, morale is kept low by the lack of adequate equipment and relatively poor working conditions. Pilots who are aware of the operations of the FAA are very likely to sympathize with the local officials, noting that it would be hard to work for an organization which does not seem to carry about its employees. Evidence of this comes from examining the radar sites in Alaska. The FAA operates only 3 radar installations in Alaska—one at Anchorage, one further north at Fairbanks, and one still further north at Prudhoe Bay. The first two installations have operating ranges of 150 mile radii; the last has a 200 mile radius capability. This does not cover the State. All three installations are equipped with Korean War vintage broad band radar systems, with no possible computer applications. Where this type of equipment is used in the lower 48 as backup equipment only, in Alaska, we have no backup equipment: If the system fails, luck is the only recourse.

As for navigational aides, we are severely deficient, to the point where many operators consider it quite a thrill to think that the FAA has purchased a new windsock for their home airport. Communications are sometimes so poor that it is possible that a controller could observe an impending mid-air collision for thirty minutes before either aircraft could be alerted through existing lines of communication.

Mr. Chairman, these are just some of the deficiencies operators are forced to deal with on a day-to-day basis. The FAA treats its Alaskan personnel as second class citizens, and harps on them to enforce regulations totally foreign to a realistic appraisal of the Alaskan situation. FAA personnel are poorly compensated for working with outdated equipment in severe and unknown weather conditions. Operators recognize that while the FAA accuses them of violating oftimes superfluous regulations which increase their costs tremendously, the FAA itself is grossly negligent in its own spending priorities. The FAA today sits upon an egg nest which far exceeds the limits of Congress's intent, and yet fails to purchase minimum equipment for its three Alaskan radar centers. Mr. Chairman, I would offer that the FAA could go a long way toward improving air safety by looking right in its own backyard. It could bring the existing radar centers up to standard with new equipment; it could alter its treatment of its Alaskan employees to maintain a consistency in operations and effect an increase in morale. It could adopt regulations to recognize the Alaskan experience, so that a floatplane operator is not required by law to weigh his passengers before takeoff from a body of water. And, finally, it could direct its efforts away from the punitive aspects of its duties and direct them instead toward assisting and explaining safety regulations to the operators.

Mr. Chairman, the history of Alaska has been shaped by the airplane, and will continue to be shaped by the airplane, if the FAA allows it to be. It is in many ways vastly different from the rest of the United States—that is why many prefer to live there. Yet, Alaskans are citizens who deserve the same dedication to safety from the FAA that the rest of the country receives. The FAA can work with the operators to improve safety and make Alaska a better place to fly, or, they stumble along blindly on their present course, dragging their feet and the transportation system of Alaska

along behind them. My hope is that they will not only criticize, but also be willing to accept constructive criticism on their Alaskan positions. Working in such a manner, they can help the carriers add to the Alaska state slogan, "North to the Future", the word "safely".

Thank you, Mr. Chairman.

Mr. MINETA. Please proceed.

TESTIMONY OF HON. DON YOUNG, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ALASKA

Mr. YOUNG. Thank you, Mr. Chairman, and members of the Committee.

First, let me compliment you in holding these hearings, because I think they will bear fruition on an issue that directly affects my State, and that, of course, is the safety and the ability to provide transportation to the people of Alaska through the commuter air travel.

I will summarize my statement, Mr. Chairman. It is before you. And hopefully, as time allows me to, I will be able to read some of the things I may overlook or skip in my short summary.

Let me stress that Alaska, as you well know, is probably the most air-traveled State of the Union. It has more airplanes and more commuters than any other State in the Union because we do not have the roads.

I have some very serious criticisms of the FAA in Alaska and how it is perceived by the air carriers of Alaska. I think the FAA's role should primarily be one of instruction and cooperation, and not one of policing.

I believe it is important that the FAA recognize that there are many rules and regulations that are thought up here in Washington, D.C. that do not apply to the situation in Alaska.

I also think that the FAA has been very negligent in their ability to staff the FAA properly in Alaska, primarily in Fairbanks. In Fairbanks, in the General Aviation District Office, there are six operation inspectors and two maintenance inspectors that serve 1,720 aircraft. They are spread over an area of 320,000 square miles, or an area roughly the size of Texas and Michigan combined. I will not say the same for Anchorage. It seems like they are overstaffed in Anchorage, and understaffed in Fairbanks, yet that is the area which has least access by any other means than air.

Again, let me stress I think some of the regulations that apply to the lower 48 should not apply in Alaska. A case in point is that FAA Regulation No. 135 requires that pilots who operate multiple-engine aircraft obtain an air transport pilot's rating. This is probably fine for 727 pilots in the lower 48 but in Alaska, where the cost of multiple-engine aircraft runs close to $300 per hour, and where the average ATP-rated pilot would be flying nothing close to a 727, these rules do not address the realities that occur in Alaska.

More than that, though, the FAA's morale in Alaska is very low. We have a high turnover of FAA employees in Alaska, primarily because of dissatisfaction with the equipment they have to work with.

It is my understanding that the FAA operates only three radar installations in Alaska—one in Anchorage, one in Fairbanks, and still further north, at Prudhoe Bay. The first two installations have

operating ranges of 150 miles; the last has a 200-mile radius capability. This does not cover any part of the State of Alaska.

All three installations are equipped with Korean war vintage, broadband radar systems, with no possible computer applications. This type of equipment is used in the lower 48 as backup equipment. We are using it as primary equipment. I believe the FAA is guilty of not utilizing the nest egg, the moneys that they have, for increasing the morale of the FAA personnel itself and buying the proper equipment, which brings me to another point.

Since being in Alaska for 21 years, I have watched the weather-reporting capability deteriorate under the guise of cutting back on the moneys available or the expenditures of money.

The State of Alaska is so large, there is no way you can mechanize or automate the weather-reporting system and have safety included. Now, they say it can be done. But if you go back through some of the accidents that have occurred in the commuter airlines, they occurred due to the lack of proper weather identification of the area into which they were flying.

Now, they have taken away the small, FAA stations, not given that onsite weather application to the airport or the vicinity, and thus, I think, increased the possibility of accidents.

Again, I want to stress, Mr. Chairman, that there is a feeling amongst the air taxi operators and the commuter services of the FAA's role being one of harassment, of policing, and lack of education.

Going back to Fairbanks, to my knowledge, the station in Fairbanks has one manual of the regulations—one manual that all of those 1,720 planes have to apply to to know what they are doing.

In all the flying I have done in Alaska, I have never found one operator, one commuter, that would jeopardize his business, his ATC certificate, by breaking a regulation if he knew it. And I think that is the main role that the FAA has to play. One is the role of an educator, a provider of knowledge, an instructor, and to help the commuter operator, the air taxi operator, to provide the safety to the commuter himself, not just to police and harass and give 35 certificates when only 7 are legitimate, and the person at that time was unaware of those 7 infractions himself.

Second, the FAA should spend some of the money to put back into the weather observation areas which they have had in the past, and to put up the most advanced equipment available to the FAA in the modern technology of aircraft today, and make us the State of advanced air travel and not one of regression.

You may say, "Well, why doesn't the State do this?" and I know this is not your prerogative. May I say this. We are dealing—if you will listen to the present President—with 97 percent of the State being Federal land. We are flying over Federal land, so why not have the best air traffic control, air weather reporting, and the highest, most qualified FAA personnel that people can have.

I think if this were to occur, the motto of the Alaskan State is, "North to the future," and then my commuter operators could add the word, "Safely, north to the future."

Mr. Chairman, I would be glad to answer any questions. I summarized that as quickly as possible. I know you have been sitting

here for a long period of time, and I respect you a great deal for that, because I know what you are going through.

Mr. MINETA. Thank you very much, Mr. Young, for your very fine statement.

I appreciate again your assessment of Alaska as a very special case because of its high degree of reliance on aviation. I notice on the bottom of page 2 and the top of page 3 of your statement that you talk about the small number of FAA inspectors who have to cover a large number of operations and an enormous geographic area. When you think about combining Texas and Michigan, that really puts it in the proper perspective. And I am wondering, from your own experience, are you saying that Alaska does need more FAA inspectors?

Mr. YOUNG. They need inspectors to instruct, to identify the realistic application of regulations to aircraft and operators in that area.

Now, I am very strongly opposed to regulations—a case in point that has nothing to do with air traffic safety as far as aircraft itself, but for instance, now we have been told by the FAA that we shall meet all security requirements at every airport. That has got to be the most ridiculous requirement or regulation that I have ever heard. When I am talking about security, if you can imagine going through a Kennedy or a National or a Dulles Airport security system, and Fort Yukon. The only aircraft that flies out of there, the maximum range is 400 miles or 500 miles. And the possibility of a hijacking out of Fort Yukon is one in 58 million. That has nothing to do with aircraft safety, but yet, they are saying we have to follow those rules and those regulations.

I am asking the FAA here in Washington to listen to the FAA personnel in Alaska and apply a logical regulation to that specific area. And they do need more people. There is no doubt in my mind that six people in Fairbanks to do the inspection of the aircraft, et cetera, et cetera, is an imposition upon the commuters themselves, and I think very frankly in some cases, they might possibly, through not conveying information, increase the possibility of unsafe practices.

But they can do this if they are properly equipped. Again, I want to stress—and I do not want to stress this answer out too long—we need the weather equipment. We have facilities in southeast Alaska that are automated that go down. And southeast Alaska weather can change within 40 miles. You can leave where it is clear when you left the area of the airport, and the area you are to arrive is clear, but in between, the weather can move in in a matter of 15 or 20 minutes. And I am saying if the automated equipment breaks down, how does the pilot know it? He does not know it, and all of a sudden, he has got himself in the jackpot.

So we need to increase the manned stations and increase the capability of radar within the State of Alaska, with the utmost modern technology and not that outdated Korean vintage, which we had back in 1956 and 1957 when it was installed.

Mr. MINETA. Knowing of your fine work here in the Congress, have you addressed this directly to the FAA?

Mr. YOUNG. I have talked to the FAA, but not to the extent—very frankly, I am finding that the FAA in Alaska are good people

on the whole. But as I say, 30 percent—every year, they have a turnover, because they are just disgusted.

Mr. MINETA. What about FAA headquarters central, here in Washington?

Mr. YOUNG. No; I have not, and frankly, to be honest with you, I commended you for holding these hearings because I think it is going to bring it to light, and I hope we will see some results in my State for safety factors. The commuter service in Alaska is nothing new, as I have mentioned before. It is getting more intense down here. It will continue to grow in Alaska, but you have got a long way to catch up with us, and hopefully, we can do it in a safety fashion.

Mr. MINETA. It is my understanding that one of the inspectors in Alaska has 52 certificates to cover, and one of them is located some 400 miles away. I assume that these are the kinds of experiences that you are talking about that are the kinds of issues and problems that have to be addressed.

Mr. YOUNG. That is true, and I think something else should be considered. I have not actually seen this occur, but I think what should happen is that the FAA workers in Alaska should have a directive from Washington to sit down with the operators themselves and listen to the operators. We are absolutely for one thing, and that is safety. But what may be safe here may be totally unsafe in Alaska. Now, you may not be able to plat it, but you have got different weather conditions, different distances, different airfields. Now, most airfields, I will be very frank with you, in Alaska, you would not land on. But that is the only way we have of commuting. And if you think a plane is unsafe, try going on dog teams over ice that is not frozen; that is really unsafe.

So this is what we are working for. And I have never found an operator yet who wants to fly unsafely if he is aware of. This is something that they are very conscious of. We do have, because of distances and climatic conditions, probably a higher rate, but it is not intentional. And I think that if the FAA were to be the instructor, work with people, you would find the operators more than willing to be cooperative. But right now, they look upon the FAA just as a policing agency, and they get stuck with something that has nothing to do with their operation at all, and they are adversaries. And that is no way to operate. There should be no adversary role between an agency and the operators themselves.

Mr. MINETA. As I understand it, there are GADO's in Juneau, Fairbanks and Anchorage.

Mr. YOUNG. Yes.

Mr. MINETA. And the inspectors are generally located at those three areas. Do you feel that there ought to be more in those three, or that there ought to be other GADO's strategically located outside those three areas?

Mr. YOUNG. I would like to see one in Nome, that covers the Seward Peninsula, which has high commuter activity. We have to look at the growth rate. Possibly, the one in Nome could cover Bethel, but if it could not, there should be one in Bethel. That covers the southwest region. There is a possibility of later on, but those two should be considered.

To go back to one other thing that I want to stress, the weather reporting system in Unalakleet, which had a big FAA station, now is all automated. And I think that they are closing the station down, the same way with Fort Yukon. I think they made a mistake when they did that. I believe that if they could increase not the salaries, but possibly the living conditions, et cetera, and left a man in place to back up the automated weather reporting system, or to utilize it as a primary reporting system, we would have less chance of accidents.

Mr. MINETA. You talked about the three radar installations at Anchorage, Fairbanks, and one north at Prudhoe Bay. Does that mean that there is no radar coverage in the panhandle down——

Mr. YOUNG. To my knowledge, there is no radar coverage down in those areas, no.

Mr. MINETA. Thank you.

Mr. Goldwater.

Mr. GOLDWATER. Thank you, Mr. Chairman.

Mr. Young, I want to commend you for, over the years that I have watched you represent the State of Alaska, the fine way in which you stand up for that State, and it represents its uniqueness. And it truly is, and for anybody who has ever had an opportunity to be in Alaska, it really is a completely different set of circumstances and situations than perhaps exist in the lower 48. And you consistently over the years have stood up, valiantly trying to explain this to our colleagues, which oftentimes, we have a difficult time to understand because we have not been there, or we have our own parochial interests. But you always seem to manage to do a good job in trying to educate us in this area.

Aviation in Alaska, from my knowledge, is different. Oftentimes, I complain to the FAA because it sets the standards that you set for, say, for instance, in the construction of a runway were these standards are those that are needed in order to accommodate the needs of Alaska, and these standards are higher because of the adverse situations that exist in Alaska which may not exist in sunny southern California. We do not need runways that are three feet thick; we do not have freezing and thawing conditions.

Mr. MINETA. Does the gentleman include sunny northern California, too?

Mr. GOLDWATER. Rainy northern California.

But Alaska is unique, and I think this is what you are saying. And what I am also hearing is that the FAA does not appear to treat you in a unique kind of way, and as a result, there are inadequate services and problems with personnel that exist.

I was somewhat surprised to hear you say that FAA treats its Alaskan personnel as second-class citizens. Could you elaborate on that?

Mr. YOUNG. Barry, first, let me say that you have gone to Alaska, and I really appreciate that, and I hope you did not mean to say I violently expressed my point of view. I know you were groping with that word, but you did not say it.

I have talked to FAA personnel, and they have now the responsibility, supposedly through Washington's direction, to enforce regulations that do not apply. This makes a very frustrating experience for a dedicated public servant.

Second, the equipment which they work with is outdated, and they know there is better equipment. They know its availability. And yet, these are FAA-supervised airports, and they have the responsibility of conveying the safety. So consequently, they feel, "Why should I put up with it? I will get out of the profession, or I will ask to be transferred." And that is where they feel they are second-class citizens.

When I first went to Alaska, FAA was the No. 1 Federal employer in the State of Alaska. There were FAA stations in every little hamlet, because we did not have the modern technology according to them. But we had a very high safety factor. And the commuter program was basically what it is now, although we have increased in population.

Then the FAA in its wisdom started shutting down weather stations, putting in second-class equipment supposedly as modern equipment, and requiring the people themselves to enforce regulations they knew were not correct to begin with. And that is what has caused some very, very hard feelings and an adversary condition, and of course, when you have that, the personnel eventually get disgusted and either ask for a transfer or get out.

Mr. GOLDWATER. Are employees ever paid higher wages because they live in Alaska?

Mr. YOUNG. Yes. They get a 25-percent cost of living allowance, and I do believe they get a higher pay scale. I know the money has not been the major problem.

As many people who work in Alaska—I am not saying they would not like to have a pay raise; everybody wants a pay raise—they are dedicated to the profession, but if they are going to be under frustration, they eventually, like I say, have a turnover of 30 percent.

Mr. GOLDWATER. You also cite lack of weather-reporting capability. Between Ketchikan and Anchorage, what is the distance?

Mr. YOUNG. Ketchikan to Anchorage is about 1,500 miles.

Mr. GOLDWATER. And what kind of weather-reporting capabilities——

Mr. YOUNG. It is all automated weather-reporting capability, and to my knowledge, it has broken down two or three times. Now, this does not affect your high-altitude jet airplanes. I am talking about one that goes from Ketchikan to Thorn Bay, Thorn Bay to Petersburg, Wrangell, and that area. They are flying at altitudes possibly 600 feet, sometimes 3 feet. I flew from Thorn Bay to Ketchikan one time in 3-foot weather for the same reason. The weather was right in Thorn Bay, it was supposed to be right in Ketchikan, and that moved in immediately after we left, because we are next to the ocean, and it moved very quickly. And that is a very exciting experience. We were doing about 65, 70 knots in a Beaver, and flat down to 3 feet off the water. It was a good pilot, because if it got any worse, we were going to float awhile. That is better than hitting one of those big mountains, you know.

But to my knowledge down there, the main weather-reporting equipment is automated, and that is not, to my own personal point of view, the way to go in that area. The weather conditions are too diverse, and if they break down, we have no backup system.

Mr. GOLDWATER. And the navigational aids, you are claiming that they are inadequate, also?

Mr. YOUNG. The radar, if you call those navigational aids, yes, I am claiming they are inadequate. They have better equipment available, and they ought to spend the money.

Mr. MINETA. Would the gentleman yield?

Mr. GOLDWATER. Yes.

Mr. MINETA. Are all of those ports, Juneau, Fairbanks, and Anchorage, ILS-equipped?

Mr. YOUNG. Yes. They have good equipment.

Mr. MINETA. Any other ILS equipment?

Mr. YOUNG. Bethel and Kotzebue and Barrow—there may be one more—yes, Ketchikan. All the major airports that are handling 727's, that type thing, the 737's, they are all equipped adequately. I am not speaking of those as much as I am the smaller airports, where the commuters are the ones that carry the burden of the traffic.

Mr. GOLDWATER. Mr. Chairman, I have no further questions. I want to thank our colleague for his contribution here today.

Mr. YOUNG. I appreciate your allowing me to appear before you. And again, I want to compliment you, because I think out of this will arrive the concept of safety. Safety is not a punitive measure; safety is something that has to be worked on together. And as I say—and I made this statement on this floor once—I probably fly more miles than any Congressman in the business, within one district, and I want to make sure it is safe, and I am confident my operators want it safe, and they want to work with the FAA, and the FAA should want to work with them and give them the opportunity to have the finest equipment. That is their responsibility, and I am glad you are having the hearings so you can charge them with that.

Thank you very much.

Mr. MINETA. Thank you. We appreciate it very much.

You were talking about the radar. One of the problems I think we see here, involving the lower 48 also, is the fact that we hear the same complaint about part 135 not being distributed here in the lower 48, and I can understand why you raise that issue.

As I understand, the new FAA Regional Director in Alaska is a person who has just been assigned recently. I am wondering if you have had an opportunity to meet with him and speak to him about some of these problems.

Mr. YOUNG. No; again, I have not. My experience with the FAA personally in Alaska has been good. But again, I want to stress that they feel that they are restricted in what they can do in criticizing the home office. That is one thing I do not agree with, I happen to think that that is part of the ball game, especially when they serve in the State. But I will make a point of meeting that individual. But it will do little good to talk to him if the central office does not approach this subject and back him up, because he can give me all the condolences I want, but that does not make it any safer to travel in the air.

Mr. MINETA. OK. Thank you very much, Mr. Young.

The hearing will stand in recess, and we will reconvene tomorrow morning at 10 a.m. in room 2161.

[Whereupon, at 1:15 p.m., the subcommittee was recessed, to reconvene Thursday, February 28, 1980, at 10 a.m.]

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COMMUTER AIR SAFETY

THURSDAY, FEBRUARY 28, 1980

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON OVERSIGHT AND REVIEW,
COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10:05 a.m., in room 2261 Rayburn House Office Building, Hon. Norman Y. Mineta, (chairman of the subcommittee) presiding.

Mr. MINETA. The subcommittee will please come to order.

The testimony of the last 2 days has covered the safety record of the commuter industry, with the Safety Board discussions centered around the accident history and the recurring causes thereof. We then followed the Safety Board with a panel of commuter operators, so that we might begin to build a record of how those particular operators have succeeded in achieving excellent safety records, records from which we will eventually be able to draw some comparisons with those operators which have been characterized as bad apples.

This morning, the subcommittee will begin the part of our inquiry which deals with the activity of the Federal agency with responsibility in the safety arena.

The FAA panel of inspectors represent different Federal regions, and these are the frontline representatives of the Federal Government. We have invited this panel of inspectors to share with us the experiences they have had in supervising this rapidly growing industry and perhaps to secure from them their thoughts and observations on how safety in air travel can be improved. We appreciate very much the fact that these very fine people have come forward to testify today.

Mr. Goldwater?

Mr. GOLDWATER. Thank you, Mr. Chairman.

I likewise join with you in welcoming these gentlemen here. I think these hearings have been very worthwhile, perhaps shedding some light on some of the problems that not only the industry has, but the FAA, as well, and other agencies of the Government.

I feel fortunate to have working with me a former FAA air carrier operations inspector, to my left, Dr. Joe Tymczyszn, who has been able to explain some of the more technical sides of this business and therefore make a little easier to follow what it is that we are trying to do.

In the last 2 days, the subcommittee has heard a number of complaints about the FAA's regulations and surveillance of commuter airlines. I think it is to the credit of the field inspectors that

most of these complaints dealt with the system rather than individual inspectors.

In any case, I have assembled a list of the complaints which I could remember. This list has been distributed to you today and it happens to be on the back of my opening statement.

My intention is to get from the witnesses their opinions on each of these complaints, which are the most serious, and what is being done to correct them.

I also assembled another list of problems which may face FAA inspectors as they try to do their job. I think it would be interesting to get your comments on those, as well.

Thank you, Mr. Chairman.

Mr. MINETA. Thank you very much, Mr. Goldwater.

If I could have those gentlemen who will be testifying today please rise and be sworn in.

Do you solemnly swear that the testimony you will give before the subcommittee will be the truth, the whole truth, and nothing but the truth, so help you, God?

[Affirmative response from Messrs. Gossen, Davis, Ellis, and Roach.]

Mr. MINETA. Thank you, very much. As I understand it, you do not have opening statements, so maybe if I could ask each of you to just go ahead and identify yourself and give us your background and experience with the FAA and maybe in the meantime some of you might have had a chance to see the list of things that Mr. Goldwater has put together here, and then we will just go right into questions and answers.

So Mr. Roach, we will just start with you, sir.

TESTIMONY OF A PANEL INCLUDING JOHN B. ROACH, CHIEF, NEW ENGLAND REGION, GENERAL AVIATION AND AIR CARRIER BRANCH, BURLINGTON, MASS.; LOUIS J. GOSSEN, PRINCIPAL OPERATIONS INSPECTOR, GENERAL AVIATION DISTRICT OFFICE, ANCHORAGE, ALASKA; LEONARD DAVIS, CHIEF, FLIGHT STANDARDS DISTRICT OFFICE, SAN JUAN, P.R.; AND WILLIAM G. ELLIS, PRINCIPAL OPERATIONS INSPECTOR, GENERAL AVIATION DISTRICT OFFICE, HOUSTON, TEX.

Mr. ROACH. My name is John Roach. I am Chief of the General Aviation and Air Carrier Branch, New England Region, FAA.

I have been with the FAA about 12 years. I have served as a field office chief, and a principal inspector in air carrier district offices. I have no experience in a general aviation district office.

We presently have a combined branch in the New England region that handles both general aviation and air carrier.

My background is primarily military flight experience. I spent 27 years with the military, active and reserve. I retired in 1975 as a full colonel. I supervised military operations that equated to the air carrier-type operations. So my background is primarily air carrier.

Mr. GOSSEN. My name is Louis Gossen. I work at the General Aviation District Office 1, at Anchorage, Alaska. I am a principal operations inspector.

I have been with the FAA for 9 years as a general aviation operations inspector. I have been a principal operations inspector at Anchorage, Alaska, for 6 years.

My aviation background goes back 24 years in general aviation. I have acquired over 12,500 flying hours, and 10,000 of those hours have been as a commuter pilot.

Mr. DAVIS. My name is Leonard Davis. I am the Chief of the Flight Standards District Office, San Juan, P.R.

My aviation experience started in 1940 with a major airline, and in 1960, I received an appointment to the FAA. I have been with FAA ever since. I have been a general aviation maintenance inspector, a principal maintenance inspector, and now a District Office Chief. I do not have pilot experience, and I do not hold a pilot's certificate.

I supervise an office consisting of nine inspectors and three secretaries. My geographic area of responsibility lies between Haiti down to Port of Spain and all the islands in between that encompass U.S. aviation activities.

I supervise 40 air taxis, 18 of which are commuters.

Mr. MINETA. Eighteen are commuters?

Mr. DAVIS. Yes, sir.

Mr. GOLDWATER. Were the Antilles and Prinair accidents under your area?

Mr. DAVIS. Yes, sir.

Mr. MINETA. Mr. Ellis?

Mr. ELLIS. My name is William G. Ellis. I work for the Houston Flight Standards District Office 62, at Hobby Airport. I have been in the FAA 5 years this June. I have been a principal operations inspector for approximately 3½ years of the 5 years I have been with the FAA.

My background is that I have approximately 5,000 hours of flight time; I spent five years in the Navy as a jet pilot. I have 2 years general aviation experience, running two different air taxis after getting out of the Navy, and 2 years flying with the Army Corps of Engineers on Gulfstream 1. Most of my experience is in sophisticated, turbine-powered airplanes.

Mr. GOLDWATER. Did you say the Army Corps of Engineers?

Mr. ELLIS. Yes. Just 2 years prior to coming with the FAA, I transferred from the Army Corps of Engineers as an executive pilot for them.

Mr. MINETA. When you were with the Corps of Engineers, you were still on active duty?

Mr. ELLIS. No, sir. I got out of the Navy in 1972, and then I spent 2 years in general aviation as an air taxi pilot and a demonstration pilot for a couple of different companies. It was a GS job with the Army Corps of Engineers as an executive pilot, flying the people from the Mississippi River Commission to Vicksburg, Miss.

Mr. MINETA. OK. Thank you very much.

Let me start, then, with Mr. Ellis. Mr. Ellis, I would like to ask what are your principal duties as a principal operations inspector?

Mr. ELLIS. Well, as a principal operations inspector, we have certain certificates which are assigned to us. The nature of the operations are air taxis, large and small, commuter and on-demand. We have certificated flight schools which we call air agen-

cies, under part 141 of the FAR's. We have aquicultural operator which we certificate. We have executive operators of large turbine powered airplanes which we give type rating checks, of which I am a specialist on three different large airplanes, the Gulfstream 1 the Gulfstream 2, and the Sabreliner.

That is just a brief overview. We also have such things as air shows and such, but we have the certification of those operators the routine surveillance——

Mr. MINETA. Mr. Ellis, if we could ask you to speak up a little more, please.

Mr. ELLIS. Basically, it is surveillance, inspection, and certification of various types of operators which I have just mentioned. There is an ongoing list of other things that we do take care of. We have industrial operators which apply for different types of waivers such as pipeline, which calls for aerial inspection of pipelines, banner-towing; we have pilot examiners which the district office designates to take care of some of the certification flight checks that we do not have the manpower to do, such as private pilot, commercial pilot, and instrument. In the Houston district alone, we are approaching 16,000 to 17,000 pilots. We have what we call pilot proficiency examiners, which give the 12 and 24 month pilot in command checks which every pilot has to take in an airplane he is going to serve as pilot in command on, which we delegate to individuals to take care of for us.

We have external load operators for helicopter operations. I could go on for about 20 or 30 other job functions, but that is mainly it.

Mr. MINETA. From your experience, would you say that the offices of the various regions are pretty much organizationally the same, so that a principal operations inspector in Houston and a principal operations inspector in Anchorage are essentially doing the same kind of work?

Mr. ELLIS. Yes, sir, I would say that is true. I have only been at the Houston Flight Standards District Office; that is the only office I have served in. I have worked with a number of different offices.

In our office, we have had six different inspectors which have come to our office from various parts of the United States, from Arizona, Cleveland, Minneapolis, Detroit, and the east coast, Pittsburgh, Philadelphia, and even though there might be some slight changes in the way the region might approach internal things that go on, I think the way that we handle the overall surveillance and inspection program is standardized.

Mr. MINETA. And how many air taxi operators and/or commuter operators do you personally surveil or are you responsible for in your position?

Mr. ELLIS. At the present time, I only have three air taxis assigned to me. I have been put into a different job description since I last testified at the National Transportation Safety Board hearing. I am assistant to the unit chief, so in essence, I take care of the certificates that are assigned to the GS–14 unit chief, which there are many ways in which you can justify the criteria for a GS–14. A 14 unit chief can have a 13 to do the certificates.

I have about 25 large, executive operators that I now take care of, rather than air taxis, directly supervise. I still do en route

inspections and flight checks and ramp inspections on a number of air taxis. We have approximately 70 air taxis in our district and about 30 air taxis which fly into our district which we do not hold the certificate for.

I do not know if that answers your question or not.

Mr. MINETA. OK. So, although your job title is "Principal operations inspector," you are really working as an assistant to the operations unit chief?

Mr. ELLIS. It is terminology. I am an assistant principal operations inspector at this time. The only difference is that the GS-14 unit chief has justification of the work that he has to do so he can do his management duties, and I take care of his certificates for him.

All the responsibility for those certificates that are assigned to me and him are still my responsibility. I just take care of the job functions for him so he can be the supervisor.

Mr. MINETA. OK. And how many did you have, then, prior to assuming this position as assistant?

Mr. ELLIS. I had 13 air taxis and one commuter assigned to me prior to this reorganization. The main reason was at that time, we had six inspectors in our office, and everybody in the office cannot do all the job functions. Not everybody is qualified in turboprop, so you do not give all the certain types of operations to every inspector in the office.

At the present time, we have 10 operations inspectors in our office. Our manning level is up to the complement that we should have now, as opposed to what it was during the time frame that I last spoke, at the NTSB hearing.

Mr. MINETA. And given the duties, then, that you now have, how are those air taxi operators and commuter operators being covered?

Mr. ELLIS. We have put an additional emphasis on commuter air taxis nationwide, and we have increased the surveillance and the inspections of commuters. We do more ramp inspections, we do more en route inspections. We do not do quite as many surveillance inspections on the on-demand carriers, not meaning that they do not require less, but if the operation has one airplane or two airplanes, we still go by and look at those people, but if we have an operator the size of Metro Airlines, approaching 180 pilots and 20 airplanes, that flew about 37,000 hours last year, we put more emphasis on that operator.

Mr. MINETA. I guess, Mr. Ellis, it is still not clear in my own mind. You are doing more administrative work now rather than inspection work?

Mr. ELLIS. Myself? I would not say that that is true. I do just as many ramp inspections and just as many surveillances as I did before. I just do it on fewer operators.

Mr. MINETA. Plus, you have assumed the three air taxi operators and the one commuter operator that previously would have been done by the GS-14?

Mr. ELLIS. I can be asked to do that. Under the guidance of the unit chief, I schedule the workload for our office now, and he sets up the priorities, and then I schedule them accordingly.

Mr. MINETA. All right. You are in Houston, and where are the principal base of operations for those certificates that you have jurisdiction over?

Mr. ELLIS. The commuter?

Mr. MINETA. Well, let us say the air taxi operators and the commuter.

Mr. ELLIS. The commuter that the office has responsibility for, or myself? I did not understand the question——

Mr. MINETA. The certificate-holder is located where? Is he right there at Hobby Field, or is he somewhere away from there?

Mr. ELLIS. We only have three commuters in our district right now which we hold the certificate for, and both of them are located in the Houston area. The base office for Metro is in Cornerlake City, which is about 8 miles south of where our office is. They do have two other pilot bases, which are located in northeast Texas and in Oklahoma. They have a route structure which goes from Houston all the way up to Oklahoma City.

Mr. MINETA. Now, for those two other pilot bases, the one, I assume, in Oklahoma is outside the Houston office jurisdiction. So you would not go over there; that would be the Oklahoma office that would cover that for proficiency checks and things of that nature?

Mr. ELLIS. Well, another inspector has that operator assigned to him as a primary responsibility, but he does go and visit each one of the other facilities once every 4 to 5 months, just to make sure things are being kept properly—even though all the records are kept right there in Houston. They are either mailed or brought down daily on the airplanes through the route structure that that particular carrier has.

Mr. MINETA. So that any checking of those pilot logs would be done by your colleagues in the Houston office at their base of operations?

Mr. ELLIS. He can, yes, sir. They do most of the training right there in Houston. They do some of the testing at the other locations. They have check airmen designated at the other locations.

As far as other geographical areas doing some of the work under the geographical concept of order 1800–12–D, where the individual chief can assign the workload as he sees his area dictates, we notify people in other district offices that we have an operator that is going into their areas, so that therefore, they can know to start surveilling, that is, doing ramp inspections and that type of work, for us, so that we do not physically have to leave Houston and go all the way to Lawton, Okla. to do a ramp inspection.

Mr. MINETA. Let me ask about your time. How much is spent in surveilling air taxis, including en route checks and other job responsibilities?

Mr. ELLIS. Right now?

Mr. MINETA. Yes, sir.

Mr. ELLIS. Air taxi activities. Can we say that as a general, any kind of air taxi surveillance inspection?

Mr. MINETA. That is correct.

Mr. ELLIS. I would say it is approaching the 50-percent level or more.

Mr. MINETA. Do you give all of the air taxis and commuters check rides?

Mr. ELLIS. We have check airmen designated to certain air taxis, and we monitor a sequence of the number of checks that they give. When they are first designated, we observe the first three that they give, and then we set up a sequence, depending upon the size of operation they have. If they have six pilots, we will probably look at one out of every three that they give. With this new emphasis on commuters, we look at all of the pilot-in-command proficiency checks of airplanes that have more than 10 passenger seats, and we do 25 percent of all of the check rides of less than 10 passenger seats. That is the sampling that we are presently doing.

Mr. MINETA. Are you the principal operations inspector for Universal Airways?

Mr. ELLIS. Not at the present time, sir. They are no longer a commuter as of this month. They are an on-demand air taxi.

Mr. MINETA. I see.

Mr. ELLIS. They surrendered their FAA operations specifications as far as being a commuter.

Mr. MINETA. And any reason for that?

Mr. ELLIS. I do not know what the management decision was on it. For about the last 8 to 9 months, the only flights that Universal has been running is between Gulfport, Miss. and New Orleans. They have not been running any other scheduled routes.

Mr. MINETA. You do not know whether their giving up their commuter certificate had any connection with the accident they had in the deactivation of the interrupt safety feature on the starter?

Mr. ELLIS. I do not think so, sir.

Mr. MINETA. Thank you.

Mr. Goldwater?

Mr. GOLDWATER. Mr. Chairman, I yield to Mr. Clinger.

Mr. CLINGER. Mr. Ellis, do you do all of the air taxi, commuter check rides?

Mr. ELLIS. Personally, I do not, no, sir, because I am not qualified in all the aircraft. There are helicopter operators, and I am not a helicopter pilot, so I do not give check rides in those type of airplanes.

I have probably given one check ride to most of the operators that we have in our district at one time or the other, yes, sir.

Mr. CLINGER. Does anybody else do the check rides?

Mr. ELLIS. Yes, sir. We have nine other inspectors that do.

Mr. CLINGER. Supposing you have a new applicant who has just obtained approval from the CAB, and they want to obtain an air taxi certificate. What would somebody in your position with the FAA do on an application like that?

Mr. ELLIS. OK. We have a system that is set up in our office—I am sure it is similar to what is throughout the Nation. We have some handout material we give the people and refer them to the fact that they have to get the CAB part 298 exemption prior to our starting our work. We tell them to read Federal Aviation Regulation part 135 so that when we have what we call our precertification conference, they can be informed enough to ask us how to go about obtaining the kind of certification that they want, because

there are various forms; there is on-demand, there is commuter, there are 10 or more, there are day, night, IFR, and VFR. So we ask them to read the regulation first and make notes, and then we set up a precertification conference. They come to us, they tell us the type of operation they would like to go into. We tell them to bring who is going to be involved, who is going to have operational control of the organization, who is going to be the certificate holder, who is going to be responsible for the operations end of it and the maintenance end of it. And we have people at the meeting from operations, maintenance and avionics, so that we can have our input to the people so that they know how to go about setting up their organization.

We give them what we call a regulations check list which, depending upon the size of operation and the scope of their activity, they answer and speak to every regulation in part 135 which is applicable to their type of operation or to 135 operations as a whole. And then they have to write a manual and a training program, depending upon the size of the operation and the number of people involved in the operation. We tell them how to go about doing that and ask them if there are any questions. Then they go back and start on the organization of putting the regulations check list together and writing the company operations manuals. During that process, there are a lot of other get-togethers between the people in our office, both in operations and maintenance, to assist them on how to put their manuals together and what does that regulation mean, if they have difficulty in understanding what it means.

Mr. CLINGER. So that the operations manual as such is prepared after their series of meetings with you.

Mr. ELLIS. That is correct.

Mr. CLINGER. Do you actually participate in the preparation of the manual?

Mr. ELLIS. Well, we do not actually prepare the manual for the individuals. We review the operations manual and the training program. The training program, of course, is approved by us and we stamp it as such. The manual itself is accepted, and if the operator says something in the training program and/or the operations manual which could be so restrictive that there is no way that he probably could live with it, but he is just saying it because he might think that the FAA would like to hear those type of things, we point those things out to him. They may be a financial burden and offer no safety increase at all by what he put in there.

Mr. CLINGER. Do you also inspect all the equipment that they expect to use in service?

Mr. ELLIS. Yes, sir, our maintenance people do that.

Mr. CLINGER. How about the check ride for the pilots?

Mr. ELLIS. Yes, sir. That comes later because part of the check ride is an oral, both over the aircraft that they are going to use, but also over the company manual that they have just written, and also over part 135 of the regulations. So until they have the manual put together, we do not get into the flight check portion, but during the initial certification, yes, sir. They have to have at least one pilot, or possibly two pilots, if it is an operation that

requires two pilots, that has had a proficiency check for each type of operation that the certificate-holder is asking for.

Mr. CLINGER. Is there an advisory circular which has been issued on average weights?

Mr. ELLIS. Yes, sir, there is.

Mr. CLINGER. And do you encourage this type of operation?

Mr. ELLIS. No, sir, we do not, and especially for the smaller aircraft, we do not, at all.

Mr. CLINGER. Why is that?

Mr. ELLIS. Because the CG range is limited. It is not as widespread. It is easier to have the airplane out of the gross weight limitations, both in regard to zero fuel weight, which is everything on the airplane except the fuel, and also just the fact that the arm and everything was an option on the smaller airplane; that people have a great effect on how the center of gravity will move back and forth.

Mr. CLINGER. Were the air taxi operators 'manuals approved by the FAA prior to December of 1978, when the new 135 became effective?

Mr. ELLIS. The air taxi manual has never been approved, both under the old and the new. The operations manual is accepted and approved.

Mr. CLINGER. Never required to be approved?

Mr. ELLIS. The training program is approved under the new 135. It was not approved under the old.

Mr. CLINGER. But the operations manual is accepted?

Mr. ELLIS. Accepted.

Mr. CLINGER. When an air taxi operator has an operations manual, is he required to operate under that operations manual?

Mr. ELLIS. Under the old part 135, it was not a violation if he operated contrary to the operations manual. Under the new 135, you can.

Mr. CLINGER. Thank you, Mr. Chairman.

Mr. MINETA. Thank you, Mr. Clinger.

Mr. Fary?

Mr. FARY. No questions at this time, Mr. Chairman.

Mr. MINETA. Mr. Goldwater?

Mr. GOLDWATER. In my opening statement, I had this list that I handed out to you, and that might be a good place to start.

Over the past 2 days, we have heard a number of complaints, and I think it would be very good to get your comments on these.

Perhaps we can start with the first one. Mr. Roach, maybe you might be in the best position to answer that, on the difference in procedures between various regions and district offices. The complaint there was that they had a regulation that was interpreted differently in different parts of the country, or even within a region.

Mr. ROACH. I have served in two regions, the New England region and the eastern region. I have seen some minor differences in interpretations and minor differences in methods of applying the regulations, which is understandable, because operators in different environments operate differently.

Whenever we in either region have a question about interpretation, we would contact the Washington headquarters for a centralized interpretation. We do that now in the New England region.

I cannot speak for the other regions, because I do not know exactly what sort of a system they have, but I would assume that they would do the same thing.

As far as we are concerned, that is the national standardization board, the FAA headquarters. Right or wrong, whatever interpretation we acquire from them is applied, and I would assume that if everybody is doing the same thing, it would be applied the same way across the country. But there are differences, and I cannot explain the differences in the other regions, because I just do not know.

Mr. GOLDWATER. Well, one of the recommendations was a national standardization board. They say that they do that for the military. Do you feel that the FAA is functioning correctly in that capacity, or effectively?

Mr. ROACH. As far as I am concerned, yes. I am familiar with the military standardization board, because I was chief of standardization in a fighter unit.

The military, of course, is regimated. Its standardization is rigid. The types of airplanes they operate are uniform by make and model across the world. The need for standardization is evident, because everybody is operating the same machine in the same way, the same method. You are transferring military people from one unit to another. You want to be sure that the individual, when he goes from unit A to unit B., operates in the same method and the same fashion.

This is not true in the civil sector. You may find two like airplanes. For instance, I am qualified in a Boeing 727. I do not think any two operators in the world have two 727's that look the same inside.

To attempt to have one centralized standardization facility for all of those different types of operations would be almost impossible.

When I say standardization from the FAA viewpoint, I am referring to standardization in the application of the rules, so that how they are applied in Alaska is the same way as they are applied in South America or Europe or Japan or anyplace else.

And as I say, the standardization board we use in the New England region is the FAA headquarters. Whenever we have a question of interpretation, application, or anything involved with a rule, old or new, we send that question, or we telephone directly to the Washington headquarters.

Mr. GOLDWATER. Any other comments, from anybody else?

Mr. DAVIS. There are advisory circulars that are issued that the public and we use in order to try to maintain a standard. Where the standards will vary is in the maintenance area, for example, is the area of operation. Certain areas of operation have environments that do not require inspections or frequency of inspections or even overhauls, as would another area that has a hostile environment. So there are variances, and that is a judgment of the assigned inspector, and it would be natural to have that difference. But the internal handbooks that are used in our work are fully

informative, and every inspector should operate the same, because every office has the same handbook.

Mr. GOLDWATER. Any other comments?

Mr. GOSSEN. Well, my work assignment is very similar to: What Mr. Ellis has described, and the way I conduct business is exactly the way he described what we do. And as far as any interpretation of a regulation, the line is open to our region, and I can call Washington direct; the line is always open if I have a problem. And I think that in that area, we are very standardized.

Mr. GOLDWATER. Have any of you heard of this complaint before?

Mr. ELLIS. Well, when you write a manual, since the manual is a management tool for the company to tell its employees how it wants them to operate, and FAA says, "There are certain areas we would like for you to speak to in that manual." We do not tell the operator how to go about speaking to those areas in the manual. So any time you have each one of them writing a separate manual, each one of them is going to have a little bit different way of presenting that material. And you are going to have a different inspector looking at the manual. So there are going to be some slight changes, and it may be because of the geography where you are, or one manual might seem more restrictive in one area as to another area, even though all the manuals have complied with the regulation.

So the human factor is always going to enter in when you are writing a publication for somebody to use. There is no universal publication.

We have an advisory circular 135-3-B which is put out to the public, which is a standard, what we say is a "go-by," that you can use to put your manual together. But how you speak to it is up to the management of that operation, as long as they speak to the areas and cover them, and they are not contrary to the regulations in those areas.

Mr. GOLDWATER. I think an example that was given yesterday by one of the operators had to do with installation of radar in the same airplane. I do not know how valid that was, or whether it was just a one-in-a-million situation, but that was one of the complaints that was raised.

I get the impression from you gentlemen that you do not perceive that anyway to be a serious problem, or you evidently have not heard that complaint a lot.

Mr. DAVIS. Well, the airline that complained about them being required to have an STC—that should have been brought to a higher level, because he was required to do something that another carrier had not been required to do, and it had been approved, and that should have been brought to the attention of a higher level.

Mr. GOLDWATER. By the airline itself?

Mr. DAVIS. Yes, yes. If he is treated unfairly or feels that way, there is always an area of higher level than the inspector. In that case, he could even go as far as Washington for a reading.

Mr. GOLDWATER. What if an airline did that? Would that not disturb the local inspector who had that jurisdiction?

Mr. DAVIS. More times than not, the inspector will come to the office chief, telling him he has a problem, and get it ironed out at that level, too.

Mr. GOLDWATER. What about the get-tough policy? You heard testimony on that yesterday, I assume, that supposedly, this new, get-tough policy is drying up sources of information and communications between the FAA and the operators. Is there any validity to that, do you feel?

Mr. ROACH. I have heard no complaints, no.

Mr. GOLDWATER. Maybe you can describe what this get-tough policy is and how you are implementing it, too, so we can get that in the record.

Mr. GOSSEN. We have received complaints from our commuter operators that they are being checked too much.

Mr. GOLDWATER. You have received complaints?

Mr. GOSSEN. Yes, yes, that they resent that sometimes, every week we are over doing ramp inspections. On our work schedule, we program one ramp inspection per month, per commuter. However, we assign inspectors in the office to go out, and that is their job, once every month.

Mr. GOLDWATER. What does a ramp inspection entail?

Mr. GOSSEN. I have a check list that I use which covers about 12 items—I should not say "I" use, but the office. We have a check list for every type of inspection that we do.

Mr. GOLDWATER. Is that a standardized check list throughout the FAA?

Mr. GOSSEN. Well, basically, it is back to what is required in FAA Inspector's Handbook, that is the check list that we use.

Mr. GOLDWATER. Do you use the same check list?

Mr. ROACH. It comes out of the FAA handbook.

Mr. ELLIS. It is a standard, printed form.

Mr. GOSSEN. But I would like to add, we have taken that information and put that on a worksheet which the inspectors will use, but again, that information is also entered on the 8006 form.

Mr. MINETA. Would the gentleman yield on that?

Mr. GOLDWATER. Certainly.

Mr. MINETA. Given that worksheet and this description of the ramp inspection, you say that regardless of whether I am in Anchorage or in Houston or wherever, that it will be the same, as far as this worksheet and the list of things here are concerned. Mr. Roach?

Mr. ROACH. It may differ, depending on the environment. For instance, if an operator operates wholely within the area of southern California, on a ramp inspection we would not be particularly concerned about de-icing equipment, whereas if he operates in Alaska, New England, or the northern portion of the United States, we would be concerned with that kind of thing.

So the check list may contain the item as an item of inspection, but again, it would vary depending upon the environment as to whether there is emphasis on that item or whether it is really needed for safe operations.

Mr. ELLIS. It also depends on how much time you have to conduct the ramp inspection. The ramp inspection is not intended to stop the operator from continuing his normal operation, so the ramp inspection is done on an unannounced basis. You find out when a flight is going to arrive, and you are there to meet it, or you are there to see a flight depart. And you check the weight and

balance and the pilot certificates, and how many people actually get off versus how many were on the manifest, and how the cargo and baggage was loaded versus how it was on the manifest, and look for discrepancies.

But if you go out there, and the flight is going to depart in five minutes, there is in most cases no way, unless you have a reason, to stop that carrier from continuing to operate, to delay that flight. So you may only get three or four items done on that particular ramp inspection. You might not get all 12 items done. It is not intended that you get all the items done on every ramp inspection. It is a spot inspection. You go out there with the intended purpose of looking at some things, and sometimes you go out on a ramp inspection for looking at a specific item.

Mr. MINETA. I recognize it is your time, Mr. Goldwater, but I am wondering, should there then be a minimum turnaround time of that aircraft so that you do have the opportunity to maybe get into it a little more in depth? Of course, for the ATCO, the air taxi commercial operator, he does not want to sit on the ground; he wants to be in the air. But for these ramp inspections, should there be a minimum turnaround so you can get in there and do that?

Mr. ELLIS. I am sure that would be nice, but I do not know how we could ever tell an operator that he has so much time that he is to have for turnaround on that flight.

Mr. ROACH. I do not really think that is necessary. The airworthiness of the airplane is the operator's responsibility. All we do as the FAA is spot-check to assure that he is in compliance with his operating manual and instructions and the Federal Aviation regulations. It is not our responsibility to assure that that airplane is airworthy. That is the operator's responsibility. All we are doing is spot-checking for compliance.

So to extend the ground time between flights, simply so we could go and do a complete ramp inspection, I think would be an economic hardship on the operator. His money is on operating the airplane, not having the FAA look at it.

Mr. ELLIS. I agree.

Mr. MINETA. Thank you, Mr. Goldwater.

Mr. GOLDWATER. Let us get back to this get-tough policy. What is that? Do you have some directive from FAA to get tough?

Mr. ELLIS. I have never seen anything like that, but we have a directive to do more surveillances and more ramp inspections and do more of the proficiency check rides.

Mr. GOLDWATER. Did you get some instruction from headquarters to increase surveillance and inspections?

Mr. ELLIS. Yes.

Mr. GOLDWATER. So that is probably what they are talking about with the get-tough policy?

Mr. ELLIS. Yes. We are more visible than probably we have ever been before in some areas. In the way of air taxis, there is a higher priority now on commuters than there is on other types of air taxi operators.

Mr. GOLDWATER. And that would be interpreted as a get-tough policy, I assume?

Mr. ELLIS. Personally, they have made statements about me that I intimidated the pilots because I was around too much. I did not do anything else. It is just the fact that I am there a lot.

Mr. DAVIS. In the present get-tough policy, we have noticed that the sanctions that are now imposed by counsel are a lot higher than they were before. When we have a multiple violation of the same regulation, it usually now is maximum, when it was before sort of a minimum.

Mr. GOLDWATER. So if you find a violation, what do you do, then?

Mr. DAVIS. In our violation process, we prepare an enforcement package which contains sufficient evidence to proceed with the case in our opinion, at the office level opinion. Then it goes to regional level for their review, and then to counsel.

Mr. GOLDWATER. Counsel where?

Mr. DAVIS. In the region.

Mr. GOLDWATER. And who is this counsel?

Mr. DAVIS. It is the regional counsel.

Mr. GOLDWATER. Does he work for the FAA?

Mr. DAVIS. Yes, sir.

Mr. GOLDWATER. Full-time?

Mr. DAVIS. Yes, sir.

Mr. GOLDWATER. He is not just a lawyer who does this part-time?

Mr. DAVIS. No, sir.

Mr. GOLDWATER. You are saying that we are seeing increased fines.

Mr. DAVIS. We are seeing higher numbers than we had seen before, yes, sir. At the district office level, we do not have the authority to put specific amounts or specific days of suspension. All we do is recommend suspension, revocation, or a civil penalty.

Mr. GOLDWATER. And you make that recommendation?

Mr. DAVIS. We make the recommendation, but we do not place an amount or days that would be involved in that violation package.

Mr. GOLDWATER. Well, let me ask you something. Is there consistency in this application of sanctions? I mean, if you recommend a civil fine for violation of weight and balance, is that a standard sanction for that infraction?

Mr. DAVIS. It depends if it was voluntary or if it was involuntary, or if it was deliberate; it would vary.

Mr. GOLDWATER. Do you feel there is consistency in the application of sanctions against violations?

Mr. ROACH. As far as we can determine, yes.

No two violations are the same, really, although they may involve the same particular result. There are aggravating circumstances. Is it a habitual kind of thing with a single operator? Was it intentional? You can tell. If it is only a few pounds, it is an error in arithmetic, and that is a consideration.

If the individual indicates that it has not happened before, and we have no evidence that it has happened before, or he takes efforts to correct it so it will not happen again, this has an effect on the sanction.

Mr. GOLDWATER. Mr. Chairman, we could go on this particular subject for a long time.

Mr. ROACH. Absolutely.

Mr. GOLDWATER. It is a very, very serious problem, and it is one that I would like to recommend that this committee sometime take a look at. And that is the inconsistency or the apparent inconsistency of sanctions due to certain violations of FAR's.

For instance, it is far more serious to revoke somebody's certificate than it is to give them a civil fine. But who makes that determination? If someone busts an FAR, a lot of it is arbitrary, or it is up to the judgment of the inspectors and the counsel, working together, I assume, in making that determination.

This is something that nobody ever talks about, but it exists, and it is a very serious problem. Normal law, English law, or common law, is built on precedent, and I am finding in the enforcement and the application of regulation, regulatory law, it is an entirely different world, and it is one that the Congress, I think, needs to get into at some time.

But I would like to get back to this intimidating kind of atmosphere that some people are saying exists that is drying up cooperative kinds of activities.

Mr. Ellis, you say they are complaining because you are there too much.

Mr. ELLIS. That was Universal. It was management that was stating that because they probably did not want us around, some of the management of that organization at the time. My management people stood behind me 100 percent because of the things that were found.

On the other hand, organizations like Metro Airlines, do not have any complaint; they like to see us.

Mr. GOLDWATER. Does anybody else have any experience in this area; have you heard this? Do you detect that there is animosity?

Mr. DAVIS. I find the reverse happening. I find the carriers are anxious to see us, because they are in fear of getting into a violation posture. I find the reverse is happening; they are coming to us. A particular case is Antilles. I have never seen them in my office as often as I see them now.

Mr. GOLDWATER. Is it standard policy or practice among inspectors to oftentimes not write somebody up for an infraction but to work with them in overcoming problems?

Mr. DAVIS. It depends on the infraction. There is an administrative process which will only involve a letter of correction or a citation, which we call a warning. There is that process. But if there is a serious violation, it cannot be ignored.

Mr. GOLDWATER. Somebody was saying, I think yesterday, that they would like to see somebody like the NTSB, somewhat like OSHA goes out today, to examine the plant facilities and operations and to cite the fitnesses, and then work with them to see what kind of remedies can be made. Does that kind of cooperative attitude exist with inspectors or with the FAA in its relationship with the airlines, or are you under direct orders to crack down?

Mr. ROACH. Our inspection process is strictly developed to improve the system. If, during the inspection process, we uncover violations, we are obligated to investigate the violation. But our inspection process is strictly to improve the system.

Mr. GOLDWATER. Well, are you rewarded for writing citations?

Mr. ROACH. Rewarded?

Mr. GOLDWATER. Yes.

Mr. ROACH. No, sir.

Mr. GOLDWATER. Do you get bonuses for so many?

Mr. ROACH. No, sir. Our sole reward, sir, is one airplane going from point A to point B without any incident. That is our reward.

Mr. ELLIS. For instance, a company's required inspection that was accomplished but not recorded, that not recording it is a violation, but versus one that was not accomplished and not recorded, there is a big difference in that type of thing. Maybe the paperwork was someplace else, but that inspection was accomplished. So we help them on things like that.

Mr. GOLDWATER. Mr. Chairman, I have further questions, but I will yield.

Mr. MINETA. Thank you very much, Mr. Goldwater.

Mrs. Bouquard?

Mrs. BOUQUARD. Thank you very much, Mr. Chairman.

One preliminary question. You said that your inspections are standardized. Isn't that what you said, that your inspection procedure is standardized?

Mr. ROACH. They come out of an FAA handbook that gives the procedures.

Mrs. BOUQUARD. Well, correct me if I am wrong. Don't the manufacturers, from time to time, send out letters to the aircraft owners for upgrading policies for their specific aircraft?

Mr. ROACH. Yes, ma'am.

Mrs. BOUQUARD. Do you have a procedure for checking to make sure that these modifications are made on a particular aircraft?

Mr. ROACH. Yes, we do.

Mrs. BOUQUARD. Would you care to comment on that, Mr. Davis?

Mr. DAVIS. Yes. Usually, it is in the form of a service bulletin. Coming out as a service bulletin, it has FAA approval. And a service bulletin is not mandatory. It will become mandatory when an FAA airworthiness directive is issued based on a service bulletin; then it must be——

Mrs. BOUQUARD. Isn't it pretty crucial to the overall maintenance?

Mr. DAVIS. If it is, it should come out as a mandatory airworthiness directive. If it is a product improvement, it is a recommended incorporation in the product. In that case, it is up to the owner.

Mrs. BOUQUARD. Well, when do your inspectors visit the airlines? Is it at night when they mainly do their checking, or is this more or less a scheduled procedure?

Mr. DAVIS. It could vary. It is often done at night, but if that is unproductive, if we find nothing developing, we may find that during the day we can do and accomplish about as much as for the actual work on the airplane, we do not reinspect the process; we just look and see if the records support that the work is being done.

Mrs. BOUQUARD. In other words, you are looking at the paperwork when the inspections are done; you do not go in when the actual work is being done?

Mr. DAVIS. We do at times, but we do not re-inspect and we do not check the exact work the mechanic is doing. We are seeing that the mechanic is using the proper data.

Mrs. BOUQUARD. Mr. Ellis?

Mr. ELLIS. Well, it is not necessarily true that all the work is done in the evening. Most of the operators do work throughout the 24 hours. It just depends on what shift you might want to go in and look on. Saying that maintenance is only done in the evening is not a correct statement.

Mrs. BOUQUARD. Well, when they do the maintenance, do you merely look over the log and see what was done and check it out paperwise, or do you actually do an inside inspection?

Mr. ELLIS. We watch.

Mrs. BOUQUARD. One thing that I have been rather concerned about is the number of flying hours for our commuter pilots. What is the average number of hours per month by pilot, would you say?

Mr. ELLIS. The number of hours flown per month?

Mrs. BOUQUARD. Yes, for commuters.

Mr. ELLIS. It depends on the size of the organization or whether or not they have a union. I would say that it probably runs in the neighborhood of 70, 75 hours a month.

Mrs. BOUQUARD. Seventy-five hours a month, you think, is the average?

Mr. ELLIS. I would say it is somewhere between that. It depends on the size of the operation. If they only run three flights a day or four flights a day, like some of the operators who spoke yesterday, that operator may not get 75 hours a month. If a man flies six or eight roundtrips a day with different locations, then that pilot may get 70 or 75 hours per month.

Mrs. BOUQUARD. Is there any restriction on number of hours flown?

Mr. ELLIS. There is a restriction on the number of hours in any 24-hour period. There is not a per-month limit.

Mrs. BOUQUARD. No per-month basis. Is it 8 hours per day?

Mr. ELLIS. It is 8 for single-pilot and 10 for an operation that requires two pilots.

Mrs. BOUQUARD. One other thing—I know we have a vote here—when you have an employee who comes to the FAA with a complaint about an unsafe condition in the airline he works for, what is done about that?

Mr. ELLIS. We investigate that, but of course, a lot of pilots complain about the operator that they just worked for; they have been relieved of duty for some particular infraction in which there was no violation, but they just did not want him anymore. We do not automatically assume the guilt of the operator just because one of his employees came and said that they are doing this, that, and the other. But we also do not want it to go unattended to, either. We do look into the allegations that they have made.

Mrs. BOUQUARD. Do you take any followup action?

Mr. ELLIS. Yes, we do.

Mrs. BOUQUARD. Thank you.

Mr. MINETA. Thank you, Mrs. Bouquard.

We have a call of the House for a vote right now, so the committee will stand recessed for 15 minutes.

[Short recess.]

Mr. MINETA. The subcommittee will reconvene.

I think what I would like to do is focus in on a couple o incidences, so if I might, I would like to get into some question here.

Mr. Davis, I believe you were present on Tuesday, when th Safety Board discussed the Antilles Airboat accident and the Prin air accident. Is that correct?

Mr. DAVIS. No, sir. I had to leave at 1 o'clock. I was not her during that part of the discussion.

Mr. MINETA. OK. What about Antilles Airboat and Prinair; ar they under the purview of your office?

Mr. DAVIS. Yes, sir.

Mr. MINETA. Now, in both of these investigations, it was discov ered that there had been previously-recorded violations for numer ous offenses, with penalties recommended, and yet in every in stance, the penalty was either never carried out or was substantial ly reduced. Was that the case?

Mr. DAVIS. Every violation was carried out, and every violation was sent forward, and every violation that was substantive wa acted upon.

Now, in the violation process, the violator has an opportunity fo an informal conference to present any mitigating circumstances that may have been omitted by the inspector investigating the violation. When this has occurred, and there are enough mitigating circumstances, the attorney in the regional office can reduce a sanction and make a compromise settlement.

Mr. MINETA. How many violations would you say were forwarded by you in the case of Antilles air boats?

Mr. DAVIS. During what time period?

Mr. MINETA. Let us say 2 years.

Mr. DAVIS. To the best of my recollection, in 2 years, there might have been six.

Mr. MINETA. And in the instance of those six, the penalties would be imposed by the counsel. When an operator of this nature is violated, do you recommend what the penalty should be?

Mr. DAVIS. We recommend, for example, civil penalty.

Mr. MINETA. And of those, let us say six, in how many instances were penalties never carried out; or let us say, were substantially reduced?

Mr. DAVIS. Well, a good deal of them got involved in the $100,000 package, which was reduced to $10,000 immediate payment and $90,000 held in abatement for 1 year, with the proviso that if there is another violation we would impose the $90,000 immediately.

There were some that were settled in compromise prior, where mitigating circumstances indicated to counsel and me that there was not sufficient evidence to proceed on some of them, and therefore, the sanction was reduced.

Mr. MINETA. And where the $90,000 was abated, was there any other violation that triggered again the imposition of the $90,000?

Mr. DAVIS. They did not have another violation case.

Mr. MINETA. And in the case of Prinair, how many violations would you say they had?

Mr. DAVIS. Prinair may have had one that I can recall.

Mr. MINETA. In a 2-year period prior to the accident?

Mr. DAVIS. Yes. Maybe one or two.

Mr. MINETA. All right. Even if there were two, what kind of penalties were invoked on those two occasions?

Mr. DAVIS. I think they paid $300 on one, which was what the counsel and District Office agreed to. It was not a compromise. That was in full settlement of an order. And there was one subsequent to the accident where there was a maintenance problem involving the company supervisor failing to sign the release of the airplane; although he had done the work.

Mr. MINETA. Let me just ask a general question not related to either Prinair or Antilles. When a violation is observed, is that first, before it is written up in any form, discussed with management or with the operator?

Mr. DAVIS. Normally, the inspector will either discuss it with management, or he will write a letter of investigation, outlining regulations that he believes may have been violated and the circumstances surrounding this alleged violation, giving the respondent 20 days to make a response with any circumstances which we have not discovered that would either eliminate the need to go any further or would be added to the violation——

Mr. MINETA. The inspector can decide that?

Mr. DAVIS. No, it is a procedure.

Mr. MINETA. Once the violation is observed and brought to someone's attention, and the management says, "Gee, I am sorry about that, but I did not get the AD. I did not know about that." Can you say, "Well, OK, then, we will just forget that one."

Mr. DAVIS. No, he cannot.

Mr. MINETA. So generally, once that is observed, it does move forward through the channels.

Just generally again, with inspection forces out there, and as you said, Mr. Roach, your satisfaction of a job well-done is making sure that some incident does not occur, and that obviously, your inspection is to be the pressure point to make sure that something does not happen. But in the case where something does happen, where violations have been observed, the process is started, counsel sets a civil penalty, and it is compromised down, does this create a morale problem for inspectors wondering, "Gee, what am I doing out here, when I have recommended a $25,000 fine, and now they have compromised it down to $800"?

Mr. ROACH. Yes, there certainly is a morale problem involved there, Mr. Chairman. It takes an awful lot of work to investigate a violation and investigate it fairly. No violations are filed arbitrarily. If they are not substantive, if they do not satisfy counsel, if there is not sufficient evidence, then it is dropped, period, and we have had that happen many times.

If it goes through, and the sanction imposed appears to the inspector and the office chief, the region and the counsel to be adequate, in line with the violation that occurred, we hate to see it reduced. If it is a substantial violation, there is a reason for that, there is a need; the evidence points to the fact that the individual was aware that he was violating or she was violating, noncompliance with the rule appears to be the standard rather than a occasion, then we feel that a substantive violation should go all the way through. When it is reduced, yes, the inspector does feel somewhat chagrined.

Mr. MINETA. And what kind of appeal procedure is there on the part of the inspector, once that decision is made, let us say, by the counsel at the regional level for compromise and reduction? Is there any kind of appeal to higher authority?

Mr. ROACH. No, sir.

Mr. MINETA. Now, the Safety Board report, Mr. Davis, on the Antilles—I believe it is the Antilles Airboat accident—did not have a designated director of maintenance, even though it had three maintenance facilities. Is that an unusual situation?

Mr. DAVIS. In my recollection, they did have a maintenance director. He was the vice president of maintenance. I knew him by name—I was not the assigned inspector, but I do know that there was a maintenance director.

Now, Antilles had four bases, rather than three, and one on each island.

Mr. MINETA. From the NTSB report, it says," At the time of the accident, there was no director of maintenance because the President and General Manager supervised the maintenance functions." But there was no designated——

Mr. DAVIS. There was no requirement at the time for an assigned director of maintenance.

Mr. MINETA. And the President and General Manager, as I understand it, was also a line pilot.

Mr. GOLDWATER. Would the gentleman yield along that line?

Mr. MINETA. Yes, surely.

Mr. GOLDWATER. Mr. Davis, I would like to inquire as to what happened when after both the Antilles and the Prinair crash, the NTSB discovered numerous longstanding problems—for instance, lack of weight and balance control, falsified logbooks and maintenance records, and so on.

Why were these things not caught before the accidents occurred? Was there a lack of emphasis at that time on inspections?

Mr. DAVIS. I would like to respond to each one, if I may. On the Prinair weight and balance, I had assigned an inspector for 2 years to develop with the carrier an acceptable weight and balance program. And when he returned they had a viable good working weight and balance system, which started in 1977 and was continuing almost to today, with some tailoring. So I kind of have a question whether that is a very accurate statement.

When the inspector left, as a matter of fact, the Airline Pilots' Association gave him a very rousing goodbye for his excellent work in the weight and balance area. So I have a question about that, because the program is still in place, and it is good. Where it fell down is that the individual pilot is responsible, the captain and his copilot, is responsible to insure that the system, once in place, is used as it is written in their manual. And in the case in point in the last accident, it was not done.

Now, on the falsification of records, and that was the Antilles case, and we have no other one on record other than that one. That was a very difficult one, because it was at the highest level of management and did not filter down to lower levels, where normally, we would have gotten intelligence of such activity. Because it involved higher level management, and that was the top three

managers detecting it would have been virtually impossible to find our about.

Mr. GOLDWATER. But wouldn't you be able to inspect those logbooks and to verify them?

Mr. DAVIS. No, because the airplane was flown without entries in the logbook of that flight, and therefore, the airplane exceeded its scheduled maintenance period by 22 hours.

Mr. GOLDWATER. Wouldn't that be detectable? It may not be an infraction, but certainly was not correct operating procedures.

Mr. DAVIS. You asked me could we have detected it, and my problem was that because it was at the highest level of management, it was difficult. It escaped the inspectors because they are not resident inspectors; they do not live with the carrier on a day-to-day basis. And most carriers have an underground. As soon as the inspector arrives, every station has notification the inspector is in the area, and certain things just go under the table, and it is just impossible to find things unless you live with them over a long period or intelligence comes from some disgruntled employee, and that is one of our main sources of this kind of activity.

Mr. GOLDWATER. That kind of contradicts what we heard just recently, that this increased inspection is drying up sources of information.

Mr. DAVIS. Well, we have never heard of anyone, after passing a red light, backing up a mile and telling a police officer he had passed the red light. This, they will not do anyway, whether the violations are low or high.

Mr. GOLDWATER. Thank you, Mr. Chairman.

Mr. MINETA. In the case of Antilles, though, they had been notified that they were being evaluated for 13 possible violations, and it seems to me out of this report from the Safety Board, at least, it can be determined that FAA regulations were disregarded on a regular basis so that schedules could be maintained, and even company officials were aware of this.

Now, isn't this something that FAA should have uncovered in a regular inspection, or maybe, at the very least, during what is called—at least, at that time, they had these SWAP teams.

Mr. DAVIS. Well, I cannot remember the date of the last SWAP on Antilles. However, falsification did not surface during their inspection. There were some areas that needed correction, but no falsification ever surfaced.

As far as the number of violations you just quoted, several of them were not Antilles Airboats but they were Antilles Airboats Limited, which was an airline owned by Maureen O'Hara, or Mrs. Blair, and they should not have been charged directly to Antilles as their violation, even though Captain Blair was an officer in Antilles Airboats Limited.

Mr. MINETA. Captain Blair was also an officer in Antilles Airboats, as well as Ltd?

Mr. DAVIS. Yes, he was the president of Antilles Airboats, Inc.

Mr. MINETA. And also——

Mr. DAVIS. He was in management or in some capacity with Antilles Airboats Limited.

Mr. MINETA. Now, in the Antilles Airboats accident, as I recall, in that case there was engine failure, and this was later found to

have questionable history in the records. It was one of two identical engines purchased at the same time by Caribbean Airmotive, Inc., whose president was also president of Antilles; is that correct?

Mr. DAVIS. That is correct. It was a subsidiary company.

Mr. MINETA. And as I recall, Mr. King or somebody from the NTSB had indicated that they were supposed to have been core engines and not to have been used unless totally overhauled.

Mr. DAVIS. That is factual, sir.

Mr. MINETA. Now, do you have any knowledge as to whether or not any further attempts have been made to recover this engine, or reasonable attempts made to determine its present whereabouts?

Mr. DAVIS. The engine was recovered after the accident.

Mr. MINETA. Yes, but there were two engines. What about that second engine?

Mr. DAVIS. The second engine was also removed as soon as it came to light there were two engines installed that might not have qualified to be installed in commercial operation. We have never determined, at least, from my knowledge, that the persons that overhauled them in France, these military people, did not hold an FAA reclassification certificate. That had never been determined, because the age of the engine went back to the sixties when it was last overhauled. It could have been, and yet it could not have been, but as far as the repair station is concerned, they did know the engines did not qualify. Records were absent.

Mr. MINETA. As I recall from the hearings or history of this, the second engine was locked in a hangar by the FAA, but before it could be examined, it was removed from the hangar where it was stored. I am wondering, have we ever been able to find that second engine?

Mr. DAVIS. You mean post-accident, the engine disappeared.

Mr. MINETA. Post-accident, that is correct.

Mr. DAVIS. No, we have never been able to find it.

Mr. MINETA. And have we made some reasonable attempts to determine the whereabouts of that engine?

Mr. DAVIS. No, sir. It just left the island.

Mr. GOLDWATER. You mean, there was never any big effort made to try to find out who stole it or where it went to?

Mr. DAVIS. [Shaking head.]

Mr. GOLDWATER. And that is the engine that failed.

Mr. DAVIS. I cannot remember—there were two engines——

Mr. MINETA. There were two engines involved. One was put on the plane, and the other one——

Mr. DAVIS. Both were operating. Both were on airplanes. But the second one was removed and returned to this air station after the accident, and it disappeared, and they claim it was stolen.

Mr. GOLDWATER. The one that was on the airplane during the accident.

Mr. DAVIS. One of them was, on the left side that had failed, yes, sir.

Mr. MINETA. And yet the second engine was one that was locked in the hangar by FAA personnel.

Mr. DAVIS. No, it was not locked by FAA personnel; it was locked by company personnel. As a matter of fact, I do not know the circumstances. I was not in field work at the time this situation

occurred, but I did hear the engine was stolen out of Antilles' facilities.

Mr. MINETA. But no other investigation as to what happened to the engine, how it was stolen, or trying to locate——

Mr. DAVIS. Well, we certainly questioned the manager of the repair station, and he said he came in in the morning and the door was broken into and an engine was missing.

Mr. MINETA. Given that it was stolen, what use could be made of that engine?

Mr. DAVIS. It could be used for parts. It could be disassembled and reexamined and qualified back as an acceptable engine in air commerce.

Mr. MINETA. But there is no way of really tracing that, then?

Mr. DAVIS. No. Serial numbers would not help much, no. It would be difficult, extremely difficult.

Mr. MINETA. Going to the matter of the Prinair accident at St. Croix, once again we heard testimony that this commuter operator had been discovered committing numerous violations prior to the July 1979 accident, many of which were identical to the cause of the accident. Penalties had been recommended, subsequently reduced, and in many cases had never been finally resolved.

Is the problem that inspectors are not finding faults, or that once inspectors find the faults, FAA does not pursue the penalties?

Mr. DAVIS. Well, from my experience, we filed one violation against the company for an overweight operation, that resulted in a fine. I believe it was $800, but I am not sure, again, how much the amount was.

We filed recently two cases against a pilot and copilot for improper storage of hand carry-on. That went as far as the NTSB hearing judge. The hearing judge found the pilots guilty, but reduced the penalty to zero. Three days later, both pilots were involved in additional violations, and I have the packages here, but they became involved again in additional violations.

Mr. MINETA. And what happened in those?

Mr. DAVIS. They are pending. The new violations against these two pilots are pending.

Mr. MINETA. And what kind of sanctions were imposed on the new ones?

Mr. DAVIS. The new ones are still in the investigative process. They are quite serious. One involved an accident, and one involved a person, a passenger, sitting in the pilot's seat during a revenue flight.

Mr. MINETA. As I recall, the certificate for Prinair was suspended in October, was it not?

Mr. DAVIS. For 3 days, yes, sir.

Mr. MINETA. And what was the cause of the suspension of the certificate at that time?

Mr. DAVIS. Well, in a letter of agreement that was developed between me, the principal operations inspector, and the company, one of the items in the letter of agreement was that a pilot or a flight crew member will be at the airplane during its loading. Another one was the calibration or verification of the scales that they will use will be accurate. And another one was a sign at each gate, that there will be only one hand carry-on.

A few of these items were not done. In particular, a pilot was not at the airplane during its loading, and they refused to be there. That developed into our action of suspension.

Mr. MINETA. Now, in the case of the weight and balance issue, we have been told that the scale used to weigh baggage of passengers was of the bathroom-type variety, so that if you had baggage that was too large to be placed on the scale that the practice which FAA had approved was to weigh the passenger first, and then have him hold the bag, and then deduct his weight to find the baggage weight.

Mr. DAVIS. No, that is not true. If they can develop a system of weighing bags, or in this case it was hand carry-on, that I think you are referring to, because I recall a letter that passed through my hands in a visit from an ALPA pilot, we said that if the company can develop any method to show that accuracy is in fact taking place during the loading of an airplane, we would accept a procedure that is shown to us to prove that. And I said even if it develops into the use of the scale—at that time, there was a bathroom scale involved—that there is a method that they could use if they desired to use it to show us it would work, but it was never approved and never accepted. It was never demonstrated. The company never demonstrated that.

Mr. MINETA. Now, Mr. Davis, you say that that procedure of using the bathroom-type scale was only for the hand carry-on and not what would go into the aft or fore——

Mr. DAVIS. It was just for the hand carry-on, because in the area where the regular baggage was passed through, they had regular scales that are common in the industry.

Mr. MINETA. And they were using those to determine weight and balance?

Mr. DAVIS. They were using that to determine the actual weight of the baggage.

Mr. MINETA. Were those personnel also qualified, as far as weighing in the baggage? As I recall, were they not also the same personnel running around doing other things such as taking tickets——

Mr. DAVIS. Well, they were people that were doing just the accepting of the baggage and recording the weight on the bag and on the tag. And then it went back to a room in the back, where the baggage was sorted out, whether it would go in "A" bin in the front, or "B" bin in the back, and a special load control person trained in weight and balance was the one who would make out the actual load.

Mr. MINETA. Has that practice of Prinair improved since that last accident?

Mr. DAVIS. Well, what we have done is we have made it a little easier for the captain to review a weight and balance form that he must accept before taking the airplane, by insisting that the weighing tape—that is, the addition—be attached to the weight and balance, so that he does not have to verify that the addition is correct, because it is already on a machine tab that will give him the total weight that was found by the load controller.

Mr. MINETA. In the case of the Prinair accident, was the FAA made aware of the incident at Beef Island, Tortolla?

Mr. DAVIS. Yes, sir, we were aware of it, and we investigated, and as a result of the investigation, the employee that misloaded the airplane was fired. It was an error on the part of the loader, because they pulled a baggage truck next to the wrong airplane, and he was told to load the airplane, and he loaded it.

Normally, with a Heron, which is sensitive to rearward CG, there are enough cues to the pilot to know he may have a misloaded airplane, because he will have his nosegear coming off the surface. If he proceeds to take the airplane without referring back to his weight and balance to see how much of a load he has in there, conceivably, he could overlook an improperly loaded airplane.

As a result of this accident, we insisted that a pilot, flight crewmember, be at an airplane when it is loaded.

Mr. MINETA. Was the Beef Island incident the one where the pilot had the two kids run up toward the front of the plane?

Mr. DAVIS. That is correct, sir.

Mr. MINETA. And that, at least from the NTSB hearings, said no violation action was taken by the FAA as a result of this incident until after the Prinair July 24, 1979, accident and during the time the safety board was holding its public hearing on this accident in San Juan.

Mr. DAVIS. The action we took after the investigation was to accept the fact that the company fired the person who was involved in the improper loading of the airplane. It was a personnel problem, and therefore, there was really no violation to take.

Mr. MINETA. Thank you.

Mr. Goldwater?

Mr. GOLDWATER. I would like to go back to my list here, and No. 4. Operators sometimes find out new rules and requirements before field inspectors do, or the inspector finds out at about the same time and is not up to speed. Is this accurate?

Mr. ROACH. Yes, it is.

Mr. GOLDWATER. It happens occasionally?

Mr. ROACH. It happens occasionally. And the reason, at least from my observation, is twofold. Primarily, we are advised about the potential rule that is about to become a rule through the Notice of Proposed Rulemaking. Everybody receives that, including the field officers, et cetera, and any inspector is authorized to respond to the comments and present his views as he sees them.

Once the NPRM goes into process, the comments are considered, and the final rule is published, we may or may not receive an advance copy of the rule. Normally, we will. On occasion, we do not, and I am not sure what the reason is for that.

However, the publication organizations throughout the country—Jepson, primarily—evidently is very closely associated with the FAA headquarters here in Washington, and they get copies of the rule the minute it is promulgated, and they immediately publish the item and distribute it to the people who subscribe to their services, so they have it within days after the rule becomes law.

Our field offices, including the regions and everyone else, including the headquarters, must wait for the Government printing process to be completed, which takes time.

Mr. GOLDWATER. Maybe you should subscribe to Jepson.

Mr. ROACH. That would raise our budget considerably. But we do wait some time for the final product to come out. In the meantime, industry probably would have it. Some individual inspectors do subscribe to Jepson on their own, deducting it, of course, from their income tax as an employment-connected expense.

But we do have that kind of a problem in attempting to keep up with the industry, once the rule is promulgated. We are aware that it is coming, but the final rule takes some time to get to us.

Mr. GOLDWATER. Any other comments?

Mr. DAVIS. We get the Federal Register, and I extract every notice or any rule, and we are about the same speed as the carrier. The CAAA which was here yesterday apparently has a good distribution organization, and some of the FAA internal information may get into their hands and get distributed before we get it, that is true

Mr. GOLDWATER. Both operators and field inspectors find out new rules and requirements with very little time remaining to comply, even though headquarters people have known about it for months.

Does that occur, Mr. Roach?

Mr. ROACH. I have not experienced that.

Mr. GOLDWATER. Mr. Ellis, have you heard that complaint?

Mr. ELLIS. I do not think I have ever heard that complaint, no, sir.

Mr. GOLDWATER. I think the Colgan representative said they had a problem like this.

Mr. ELLIS. If you could be a little more specific——

Mr. DAVIS. I think they were talking about the AD on a Beech 99.

Mr. GOLDWATER. Dr. Tymczyszyn?

Dr. TYMCZYSZYN. The Colgan representative yesterday talked about an inspection on a Beech 99, and it was mailed to him, the mail took 3 days, but the requirement was to inspect before further flight, and through phone calls or something, he was able to find out, but it was a big problem for him. But if you were present, you would have heard the——

Mr. DAVIS. Yes, I remember that. If I may just comment on it, we got the telegram from the FAA that there was an emergency airworthiness directive issued, and that we should notify every operator of a Beech 99. There were none in my area, so we did not take the immediate action. But if I were the office chief where a Beech 99 was in my area, I certainly would have made a telephone call or had one made to him immediately, even if it occurred at 12 at night, if it is a grounding rule.

Mr. GOSSEN. I would like to add that we have received the information on another AD note, which was the King Air 200T, which is very similar. I had the standby duty that particular weekend, and I was notified at 12:30 at night that we had received the message with the AD note. I picked up all the information at 6 in the morning, and I delivered it to the operator. They did have the aircraft scheduled for 8. I got it out there in time so they could supply another aircraft, and I thought the communications were pretty good.

Normally, that is how we did that on all AD notes.

Mr. GOLDWATER. Do you have a problem with communications with headquarters all the way up the line, sir?

Mr. GOSSEN. No, I would say no.

Mr. GOLDWATER. Mr. Gossen, jumping down here to this Alaska operation, No. 7, in Alaska there is a lack of inspectors, weather reporting, radars, and navaids. Consequently, the inspectors have low morale and high turnover. Is that an accurate statement in your observation?

Mr. GOSSEN. In our office, we are lacking one journeyman inspector at this time. We have five principal operations inspectors; we have four assistants to the principal operations inspectors; we have one accident prevention specialist, and we have a unit chief. Once we fill that one position, we will be fully staffed at the present time.

Mr. GOLDWATER. Well, let me ask you, when you say fully staffed, is that adequate to do the job?

Mr. GOSSEN. No, but that is what we are allotted at this time.

Mr. GOLDWATER. You are allotted how many total?

Mr. GOSSEN. Including the accident prevention specialist and the unit chief, there are nine. The operations inspectors, the unit chief, the accident prevention specialist, and one vacancy.

Mr. GOLDWATER. Is that for the whole State of Alaska?

Mr. GOSSEN. No, that is just for the Anchorage GADO.

Mr. GOLDWATER. So you have nine. To do an adequate job, what would you say you should really have more or, to do a better job?

Mr. GOSSEN. Well, they are going to reevaluate the workload that we have, and I believe that our GADO supervisor intends to request four additional operation positions.

Mr. GOLDWATER. How many aircraft do you have under your area?

Mr. GOSSEN. In the Anchorage area, we have 790 aircraft that we are responsible for.

Mr. GOLDWATER. And you only have nine people to take a look at those?

Mr. GOSSEN. Well, no, we have the maintenance section, too. I am just speaking for operations. We have maintenance inspectors, too.

Mr. MINETA. Would the gentleman yield on that?

Mr. GOLDWATER. Yes.

Mr. MINETA. Mr. Gossen, you specifically have how many air taxis, commuter airlines that you are responsible for?

Mr. GOSSEN. Right now, I am assigned to 32 air taxi operators. Four of them are commuters.

Mr. MINETA. So how many aircraft does that total?

Mr. GOSSEN. For the 32 air taxi operators, that involves 290 aircraft.

Mr. MINETA. Does the 290 include the commuters?

Mr. GOSSEN. The commuters are included in that number.

Mr. MINETA. And how large a geographical area do you cover?

Mr. GOSSEN. Anchorage, GADO 1, we have one operator that is 1,846 miles from Anchorage, Alaska. He is located at Akutan, which is very near Dutch Harbor. Our area from the extreme west to the east of the mainland is 900 miles, and from Anchorage

westward is 540 miles, and of course, the 360 miles would be in the easterly direction.

Mr. MINETA. So how much time would you say is spent traveling?

Mr. GOSSEN. A considerable amount. Of course, the area that I am assigned to is within a rather short distance of Anchorage, but many of the itineraries consist of 2½ hours flying in one direction in a multiengine aircraft.

Mr. MINETA. Now, has the number of air taxis and commuters that you have under your jurisdiction been reduced recently?

Mr. GOSSEN. Under my jurisdiction, yes, sir.

Mr. MINETA. And how recently was that?

Mr. GOSSEN. I have been carrying about 32 air taxi operators since about March of 1979, which is almost a year.

Mr. GOLDWATER. It was reduced from what to what?

Mr. GOSSEN. I cannot remember the total number. I know that one time I had 52. At the time of the AAI accident, I cannot remember the number now, but there has been a considerable reduction.

Mr. MINETA. Was it reduced as a result of the AAI accident?

Mr. GOSSEN. Well, I believe that during the hearings that they may have influenced our office obtaining four additional operations inspectors. But I am just, again, speaking from operations. Maintenance is another area, and they have their own inspectors, and that has increased in numbers also.

Mr. MINETA. So how many days per year would you be able to give to each of the operators you cover?

Mr. GOSSEN. I have scheduled as many base inspections, surveillance and ramp inspections that I feel is realistic. For commuters, I have scheduled one base inspection for each commuter; for the air taxi operators, I have scheduled one base inspection, and the commuters are scheduled for two surveillance inspections per year. And if my workload allows, I will conduct more inspections. Ramp inspections, we schedule one each month, and because of the high emphasis on commuter operators, that has priority.

The only thing that has priority over my work with commuter operators generally is if we have problems with individual commuters, and when I resolve that to the best of my ability and I then continue with whatever my next priority is.

Mr. GOLDWATER. You schedule one surveillance for each commuter per month?

Mr. GOSSEN. Ramp inspection, yes.

Mr. GOLDWATER. One ramp inspection, per commuter, per month.

Mr. GOSSEN. Yes, that is correct.

Mr. GOLDWATER. Mr. Ellis, what do you do in that regard? How many ramp inspections per commuter per month do you do?

Mr. ELLIS. Well, I schedule most of the workload for our office through the direction of the unit chief, and it depends on the scope of the operator. We do approximately four ramp inspections; on a large operator, maybe even six, a month, on an operation as large as Metro Airlines, with 170-some-odd pilots in the locations they have, and we schedule approximately four to five en route inspections per month on that operator. But we do not have the geography problem that Alaska has. In my area, they are very frequent,

they fly almost 37,000 hours a year, so it is pretty frequent that you can get on an airline to do an en route. They run one about every 15 minutes from Cornerlake City, Tex., which is just south of where our office is to Houston Intercontinental Airport.

Mr. GOLDWATER. But you are saying on Metro, you do about six ramp inspections per month.

Mr. ELLIS. I would say anywhere from four to six, and then we may get more than that.

Mr. GOLDWATER. And you wind up with only one.

Mr. GOSSEN. OK, but let us compare aircraft now. I am talking about this commuter carrier having four multiengine aircraft, one single-engine aircraft.

Mr. ELLIS. That is right, and Metro has approximately 20 aircraft. Concerning the policy to increase surveillance of commuters, we did this even before the increased surveillance notice came about from headquarters; we always scheduled this many inspections, so there was not really any change in office policy as far as carrying out increased surveillance on commuters. We always did that, but we did not have the geography problem. We are only 15 minutes from where our office is to go down and do that. And of course, we get about 30 other operators that come in and out of Houston, and we do ramp inspections on every one of them, sometimes one a month, sometimes one every 3 months. It depends on the frequency that they run into our district.

Mr. GOLDWATER. Mr. Gossen, could you characterize your operation up there as having low morale and high turnover?

Mr. GOSSEN. In the GADO office, no. When you are working with 30 or 40 people, I assume that on occasion, you will have a morale problem. In the past, and over the 6 years that I have been in Anchorage, I have experienced good morale.

There has been a turnover. There are people who come to Alaska, and either you like it, or you do not like it. If you do not like it, you leave.

Mr. GOLDWATER. But you would not say generally in the FAA operation in Alaska, there is low morale?

Mr. GOSSEN. In the general aviation district office, we do have a tremendous workload. That does cause a morale problem.

Mr. GOLDWATER. Is there concern by FAA personnel for the seeming lack of navigational aids, weather capability, or communication.

Mr. GOSSEN. As far as the navigational aids and the weather reporting facilities, I believe that that information should be obtained from another division of FAA, from air traffic control. I do not feel that I can give you the correct information.

Mr. GOLDWATER. Do you have an opinion?

Mr. GOSSEN. I hesitate to give opinions on that, because I would rather be able to present to you the factual information.

Mr. GOLDWATER. Mr. Gossen and any of you gentlemen, were you briefed by the FAA before you came to this hearing?

Mr. ROACH. No, sir.

Mr. DAVIS. No, sir.

Mr. GOLDWATER. Were you counseled as to what to say or not to say?

Mr. DAVIS. No, sir.

Mr. ELLIS. No, sir.

Mr. GOLDWATER. Were you threatened at all?

Mr. GOSSEN. No.

Mr. ROACH. We had no idea what was going to be presented t
us, so we could not be counseled. I was made aware that I wa
going to be here last Thursday evening at about 4 o'clock. With n
preparation they said to report down here, and that was it.

Mr. GOLDWATER. And they did not instruct you what to say o
how to say it or respond to questions?

Mr. ROACH. We did not know what we were going to be ques
tioned on, sir.

Mr. GOSSEN. I was in Fort Worth Thursday last week, and I go
the message. And I had no information whatsoever what this wa
about, other than the chief of our office instructed me to report
here.

Mr. GOLDWATER. Well, why is it difficult for you to express your
own personal opinion? How long have you worked in Alaska, 6
years?

Mr. GOSSEN. Yes.

Mr. GOLDWATER. You must have an opinion. I am not asking for
anything specific. I am not asking you to really be a spokesman for
the official position of the FAA. I am just asking you for your
personal opinion as someone who has to work within that system
whether you are satisfied that there are sufficient navaids——

Mr. GOSSEN. As far as safety, I am never satisfied. I think that
we can always improve. We can have more airways, we can have
more radar, more weather reporting service, more flight service
stations. We can have all that, and I am not in a position to
determine how the moneys needed for this can be allotted.

Mr. GOLDWATER. Well, the equipment is reported to be of Korean
war vintage; is that the case with radar?

Mr. GOSSEN. Well, I would like to refresh my memory on—I
believe Congressman Young mentioned three airports that had
radar. Could you——

Mr. MINETA. North of Prudhoe Bay, Anchorage, and Fairbanks.

Mr. GOSSEN. Yes. OK. I have used radar in the King Salmon
area. That is under the jurisdiction of the military. If you are just
talking about FAA facilities——

Mr. GOLDWATER. You have the authority—I mean, your basic
area of concern is with operation.

Mr. GOSSEN. Yes.

Mr. GOLDWATER. What about weather reporting; that is directly
related to pilot capability and safety, weather reporting facilities.

Mr. GOSSEN. Yes, that is correct. It is required by part 135.

Mr. GOLDWATER. Is it sufficient up there; is it adequate, or is it
antiquated, is it reliable, or what?

Mr. GOSSEN. Our operators that operate, under IFR rules, have
the weather reporting facilities at the airports they operate in to.
But we have a tremendous number of pilots who operate VFR only,
and fortunately, they have ways of contacting people through other
air carriers.

Wien and Alaska Airlines, they cooperate with our pilots, and I
know that the part 135 operators have received weather informa-
tion from the air carrier operators. There are quite a number of

flight service stations in Alaska that give a pretty good forecast and the actual picture of what the weather is like.

I agree with you, the more the better. But I have been flying when I wished that I had more weather information than I had, and I am sure we all have.

Mr. GOLDWATER. Are rules that are written for the lower 48 appropriate for Alaska?

Mr. GOSSEN. I have discussed that with pilots many times. Most of them feel that the airplanes fly the same, and they perform the same at the temperature and density altitudes. We can argue that all day, but as far as safety is concerned, we need the regulation.

Mr. GOLDWATER. But down in sunny California, you are saying there is no difference as far as rules and regulations that are created for sunny California; the situation is the same in Alaska, and the rules and regulations are enforced the same and should be?

Mr. GOSSEN. I would have to know which rules we are referring to.

Mr. GOLDWATER. Well, you are not aware of what I am talking about is what you are saying.

Mr. GOSSEN. That is correct.

Mr. GOLDWATER. You do not know what I am talking about?

Mr. GOSSEN. I know you are talking about the regulations, and if they are applied to Alaska or not.

Mr. GOLDWATER. Do you enforce them differently?

Mr. GOSSEN. No, sir.

Mr. GOLDWATER. You enforce them exactly the same as you would up in New England or Florida or California.

Mr. GOSSEN. Yes.

Mr. GOLDWATER. Do you think that is appropriate and correct? You don't think Alaska has any uniqueness to it that would prompt you to seek a change in the regulations?

Mr. GOSSEN. Well, they have. For instance, they have determined that they do not need radar in the 10 or more passenger aircraft. The Twin Otter does not require radar. In the lower 48, that is required. So they have provided relief in some areas. In fact, if the operator wishes or feels that he should have an exemption from a rule—and occasionally, for example, it does happen that a pilot has met all the requirements for his airline transport pilot's certificate, but has not yet attained the age of 23—we have, through FAR part 11, guided that individual in getting an exemption from the requirement of part 135. That is possible. When people ask me, I provide them with the information, they are the ones that have to request this information.

Mr. GOLDWATER. So you do not see a problem here, in other words?

Mr. GOSSEN. No.

Mr. GOLDWATER. OK.

Thank you, Mr. Chairman. I have more questions, but I will yield.

Mr. MINETA. Fine. I just want to state that you are not on trial. We really asked you to come in because we need the help. We are not on the line as you folks are. And yet, you have got a wealth of background, all of you, and we are just trying to pick your brains,

so to speak, so that we might be better informed about whether or not the money we are spending is well-spent, whether or not the rules and regulations really fit the situation, whether or not more moneys are needed somewhere.

So I really would like to just mention that you are not on trial. We do want full and candid answers from you relative to this, because we do need the help, I think, from a congressional perspective about the fine work that all of you are doing out in the field.

Mr. Fary?

Mr. FARY. Thank you, Mr. Chairman.

Mr. Ellis, you stated earlier that your office had gone recently from 6 inspectors to 10 inspectors. Was that because vacancies were filled, or were you given new slots to fill? How and why did that increase come about?

Mr. ELLIS. Yes, to both. We filled three slots which had been vacated, and we were given two additional slots. And we expect to receive more. And the reason why, I do not know—I am not at the manpower decision level to know why our office justified more. I know the workload that we have in our office, and that decision was made, I am sure, further up the line, at the regional and headquarters level, why we received additional manpower. Houston is a very rapidly growing area down there: economywise, it is probably one of the highest and most stable in the country, and any time there is an influx of people, then there is going to be increased aviation activity, and I am sure that is probably the reason why we were given more people.

I do not know the reason why we were given more, but I would assume it was because of the expansion in our area.

Mr. FARY. Now, for each of the four of you, here is another question. We have discussed here today the fact that you are giving greater attention now to commuter inspection partly as a result of the new part 135, partly as a result of the new, "get tough" policy. Do you now have more inspection staffing to handle the new load, or are you giving less attention to areas other than commuters, so that you can give more attention to commuters?

Mr. ROACH. If I might, Mr. Congressman, the increased surveillance, as you indicate, primarily came about as a result of the recertification under the new part 135. Of course, with increased surveillance, you are going to find more things, and when you find more things in conjunction with the get-tough policy, it appears as though we are levying an awful lot of violations on operators. This is not true.

The staffing that we have had to be adjusted slightly. We had to decide what things we were going to do and what things we were going to do differently than we had in the past.

Some of the things we have done include taking the written examinations out of the FAA district offices. We have given to responsible people in the aviation industry authority to administer these exams to the people who desire to take an exam. We have designated additional pilot examiners from the aviation industry and given them the FAA authority to administer pilot flight checks and award certificates to private pilots, commercial pilots, airline transport pilots, and flight instructors. This now takes quite a

workload off the field office, because they spent an awful lot of time doing these kinds of things.

We have designated flight instructors, which we have never had before. That has been a luxury always reserved for the FAA. We have given that to designated people in the aviation industry, responsible people.

We have initiated the accident prevention counselor program and emphasize that to a great extent so that these people can go out and talk to people in the aviation industry who may be having operational problems, revealing some safety deficiencies, and these people can go one-on-one with these individuals, and with their experience, try to correct problems before they get started. Now, this is in the general aviation area, the Sunday afternoon pilot with the light airplane. Because now our attention is diverted to the commuter, we cannot give the attention to these individuals that we did.

With all of these emphasis items and all of these additional things taken away from the field inspector, he now has the opportunity to devote more time to the commuters, air taxis and other things related in the safety areas with the revenue operators. So we are filling the gaps that we are dropping by using the industry and giving the inspector more of an opportunity to deal with the more serious areas that we consider.

Mr. FARY. Would any of the other gentlemen wish to comment on that?

Mr. DAVIS. Obviously, other areas are suffering with the result of notice 8000-176, and we are looking less in the general aviation area or the noncommercial area than we had before. Particularly large aircraft, large general aviation aircraft, are not being looked at as frequently as we would like, because our manpower is now devoted to a program guideline which gives us a required number of inspections to accomplish. Certainly, the other areas are not being attended to at the frequency we would like.

Mr. ELLIS. Well, you know, even with the increased surveillance of commuters, we still have people that come to the office and make applications for flight schools or other activities. They still take time, and violations do occur in other areas other than air taxi; In fact I would say the majority are in areas other than air taxi; We also have aircraft accidents which require a lot of man-hours' plus those other types of complaints and investigations that we have to do, which take up a lot of time.

So as with anything else, we are still kept extremely busy on other areas besides the commuter industry.

Mr. FARY. Thank you very much.

Mr. Gossen?

Mr. GOSSEN. I agree, that with the higher emphasis on commuters we do not have the time available to conduct all of our other job functions.

Mr. FARY. Thank you very much.

I yield back my time.

Mr. MINETA. Thank you, Mr. Fary.

Mr. Clinger?

Mr. CLINGER. Thank you, Mr. Chairman.

Mr. Gossen, you may have answered this, but are all of the GADO inspectors in your Alaska region located in Anchorage?

Mr. GOSSEN. No. We have a Juneau office and an office in Fairbanks. Alaska is divided up into three areas.

Mr. CLINGER. What about places like Bethel or Kodiak?

Mr. GOSSEN. We handle Kodiak and Bethel, Alaska through the Anchorage GADO.

Mr. CLINGER. Do you have any extra incentives for a person to serve in Alaska with the FAA? Does it require any extra incentives?

Mr. GOSSEN. Well, they have had a problem recruiting people to work in the GADO in Alaska, because of the vast area. Some people do desire to go to Alaska just to be in a different area. However, from the grade status, if you are referring to that, no, there is no additional incentive to be in Alaska.

Mr. CLINGER. Is the reason that you handle such places as Bethel, Homer, or Kodiak from the Anchorage office because it would be very difficult to get people willing to serve in those areas, or because you feel you can handle those efficiently from the Anchorage office?

Mr. GOSSEN. I think that it was in 1979 or possibly in both 1978 and 1979, we did have a satellite office in Bethel. We operated the satellite office there until we felt that we had improved conditions in Bethel to the point where we could handle the required job functions from the Anchorage GADO.

Mr. CLINGER. So it was cut not for budgetary reasons, or because the personnel were not willing to be there.

Mr. GOSSEN. Definitely, Bethel is not a desirable place to live.

Mr. CLINGER. I am sorry?

Mr. GOSSEN. Bethel, Alaska, is not a desirable place to live.

Mr. CLINGER. So it was really a matter of that more than anything that you closed the office.

Mr. GOSSEN. Normally, we rotate the inspectors assigned to the Bethel area each year, because they feel like they have put their year in, and they want something a little better.

Mr. CLINGER. It is hardship duty.

Mr. GOSSEN. Yes, it is, with no extra pay.

Mr. CLINGER. What is the difference between a surveillance and an inspection?

Mr. GOSSEN. A base inspection is an in-depth inspection of all the activities conducted by the operator. A surveillance may cover several areas, and the depth of that inspection is determined by the inspector. If you should locate problem areas, then naturally, you will continue to inspect that area. Surveillance could be a random sampling of pilot records. Normally, on the base inspection, we check all the training records and all of the flight records and duty time. We again have a check list that we use.

Mr. CLINGER. So the inspection is a more rigorous procedure than the surveillance?

Mr. GOSSEN. That is correct. The base inspection is almost identical to the initial certification of that air taxi operator, which would involve checking the manual.

Mr. CLINGER. Would the surveillance procedure include any flight checks at all?

Mr. GOSSEN. Normally, a flight check is not considered a surveillance. It may be done at the same time, but a flight check is not considered a surveillance.

Mr. CLINGER. Not part of the surveillance process.

Mr. GOSSEN. That is correct.

Mr. CLINGER. For any of you, what is the company check pilot, and what is his relationship to the FAA?

Mr. ROACH. First of all, the company has to decide who they need to do checking within their own organization. They petition the FAA for "John Doe" in their company to be assigned as a check pilot. We in turn would insure that the individual was properly trained in flight check procedures and aware of the FAA regulations dealing with flight checks; then we would designate the individual by letter—I am sure this is handled the same in the GADO as it is in the ACDO.

The individual is then a representative of the FAA; he serves at the pleasure of the FAA. If for any reason during his tenure we find that he is not performing up to the standards we initially established for him, then we remove him from check airman status. But as he gives flight checks, he is representing the FAA. Periodically, we will perform surveillance upon this individual as he administers a flight check to make sure that he is maintaining the same standard.

Mr. CLINGER. But he is under the direct supervision of the FAA?

Mr. ROACH. He is an FAA representative.

Mr. CLINGER. He is paid by the company?

Mr. ROACH. He is a company employee, industry representative, civilian, not employed by the Government at all.

Mr. CLINGER. We have had testimony from the NTSB that sometimes the check pilots have additional duties, such as being a training officer or flying a regular schedule. When you would be faced with a situation like that, do you give that commuter a much closer look than you would another operator in the case of these dual activities?

Mr. ROACH. This would depend on the size of the operation, really. If it is a very small operation, the operator would probably have to use that check airman as one of his line pilots. If it is a large, sophisticated operation, similar to the ones that were here yesterday, they could probably afford to hire full-time people who would serve as check airmen.

Mr. CLINGER. Do you actually know of instances, any of you, where there is this duplication?

Mr. DAVIS. It is very common.

Mr. CLINGER. But I guess my question is, Do you have any different procedures in dealing with that situation than you have with any other?

Mr. ROACH. We have not found it to cause any problem.

Mr. CLINGER. It has not caused any problem. Is there any FAA directive which establishes how often commuters and air taxis must be inspected—and again, I may be repeating here.

Mr. DAVIS. Other than notice 8000–176 that establishes frequency, I know of no other.

Mr. CLINGER. But that does establish a frequency for how often they must be inspected.

Mr. MINETA. Would the gentleman yield on that point?

Mr. CLINGER. Yes.

Mr. MINETA. Is there advance notice to the commuter operators as to when that inspection will occur, whether it is a ramp inspection or any other kind, en route?

Mr. DAVIS. For en route, you normally give 24 hours advance notice so that you can get a seat; if you give less than 24 hours, you will not block the seat and demand it. You can make an en route. There has been a new policy just established for air taxis that you will ride and must ride if you give them more than 24 hours' notice.

Now, ramp checks, are pop-ups; you just appear. For spot checks and maintenance checks, you just appear, without advance notice.

Mr. CLINGER. How long have you had this frequency of inspection requirement?

Mr. DAVIS. Notice 8000-176? I believe it came out in April or May.

Mr. CLINGER. Of last year?

Mr. DAVIS. Of 1979.

Mr. CLINGER. Before that, there was no such directive?

Mr. DAVIS. Before that, you moved your resources as you felt the need, and you made a work plan and you tried to cover the work plan, and when there was emphasis needed, you moved the resources to the emphasis area.

Mr. ROACH. It was left up to the district office chiefs to provide surveillance or inspections in his area that he thought was necessary, depending on the size of the operation, frequency of operation.

Mr. CLINGER. So it could have varied dramatically, or at least significantly, from office to office or district to district?

Mr. ROACH. Yes, depending on what the safety need is.

Mr. CLINGER. But now we have, presumably, uniformity between the districts.

Mr. ROACH. Well, no. This notice 8000-176 is on top of your normal surveillance; it is in addition to.

Mr. CLINGER. I see.

Mr. ROACH. So it is an extra requirement.

Mr. CLINGER. Have any of you ever issued a violation to a pilot on an en route check?

Mr. GOSSEN. Yes, sir.

Mr. CLINGER. For what reason, or can you cite a specific reason?

Mr. GOSSEN. Well, mine was in violation of FAR 91.33(b)(11). He operated beyond gliding distance of shore, and there was no flotation gear on board the aircraft.

Mr. CLINGER. You had one instance where you had to do that.

Mr. GOSSEN. That is correct.

Mr. CLINGER. Anybody else?

Mr. ROACH. Failure to follow the check list; operation through clouds on a VFR flight plan; failure to adhere to the minimums established on instrument approach.

Mr. CLINGER. These are all on the same flight?

Mr. ROACH. No, no, these are different. Over the years, I have had several. Those are just three that I can recall.

Mr. CLINGER. Mr. Davis or Mr. Ellis, have you ever had occasion to cite a pilot on en route check?

Mr. DAVIS. No, sir.

Mr. ELLIS. We have found problems, but they were not necessarily violations.

Mr. CLINGER. In the cases of Mr. Roach and Mr. Gossen, do you know what happened to your recommendations on this?

Mr. ROACH. In two cases, the pilot's certificate was suspended, and in the third case, I think it was a civil penalty.

Mr. CLINGER. In general, would you say that you feel that you get backup support from the regional office on these, and they do tend to reflect your recommendations?

Mr. ROACH. Yes.

Mr. CLINGER. Would you say the same, Mr. Gossen?

Mr. GOSSEN. Yes. Mine ended up with an NTSB hearing. The pilot did have his certificate suspended for 20 days.

Mr. CLINGER. I ask this because we have had testimony in areas where they have indicated that the recommended fine or penalty or whatever had been substantially changed from the report, or the fines reduced. And I take it in the three cases where you have had this, you have not——

Mr. ROACH. In these cases, no, but that has happened in the past.

Mr. CLINGER. Thank you, Mr. Chairman.

Mr. MINETA. Mr. Levitas?

Mr. LEVITAS. No questions.

Mr. MINETA. During these hearings, we have heard the phrase, "bad apple." From your own experience, do you think you could spot one walk in, or as you are doing your own work, you could spot one?

Mr. ROACH. I have some serious problems with that term, Mr. Chairman.

I have dealt with a lot of field offices and a lot of inspectors in my 12-year tenure. And the term, "bad apple", runs the gamut from the operator who hates the FAA for no particular reason to the habitual violator who fails to comply with the rules.

So, based on that, I am not sure what the definition of a "bad apple" really is.

Mr. MINETA. Is that because it also means that you have got a sort of a prejudgment on your own part about an operator?

Mr. ROACH. Right. We deal with a lot of operators who do not particularly care to see the FAA; even though they are in full compliance with the rules, they just do not want to see you coming around doing inspections. They feel that you are infringing on their economic status or their ability to earn a living, and they voice that opinion. They make it very uncomfortable for the inspector to be in their environment, even though we go about our normal business. Some inspectors will call that a "bad apple", and it is not really. You just have to accept the individual's character and go about your business the way you were trained.

If it is an habitual violator who failed to comply continually with the rules, then we will increase surveillance sufficiently to determine whether or not this individual should remain in business. We do not want anybody out there operating who fails to comply with the rules. And if we can prove this, we are going to remove that

individual from service. Now, that is the kind of "bad apple" I assume you were talking about, but he is very evident. Once you inspect his records, go through his system, you can determine almost immediately that he is not complying with the rules—he or she, as the case may be.

Mr. MINETA. Would anyone else care to comment on that?

Yes, Mr. Goldwater.

Mr. GOLDWATER. There is a commentary on something I have heard that has been quoted about inspectors, and it goes something like this. A Catholic man went to a priest with a problem. Father, I am going to be married soon. My problem is that I have never told my future bride about my family. You see, I have three brothers and a sister. My brother Bob is a convicted murderer. My brother Bill is a convicted rapist. My brother Tom is an FAA inspector. My sister Sue is a prostitute. Father, what should I do?"

The priest said, "Well, son, tell her the truth. But if you really love her, do not tell her about the FAA inspector."

Mr. ROACH. Sometimes it feels like that.

Mr. GOLDWATER. Mr. Chairman, I have to apologize. I have a 1 o'clock appointment, and I did not get a chance to really get into the rest of these observations or comments that have been made over the past 2 days.

I want to thank you gentlemen for being here today. I concur with what the chairman has said, that this is an effort on our part to better understand the problems that you face.

We happen to believe that the job that you perform is an important job, and we want to make sure that you have the tools to do the kind of job that you are required to do, and I think this is an effort to try to get a better understanding.

And I would like, if you feel inclined to address yourselves to any of these comments, if you feel so inclined, and send them back to us. I think it would be very helpful to have some of that information, if you would like to take a look at those and submit any observations or anything that we have not even covered, as a matter of fact.

Mr. MINETA. Thank you, Mr. Goldwater.

Given the fact that we have these new 135's and this 8000.176 regulation that you have referred to, we are concerned with, first, Are there enough inspectors out there to really do that increased surveillance, given the Deregulation Aviation Act and the increased pressure on commuter airlines to provide central air service, especially to small communities? So we have got the question of the additional inspectors that may be necessary and whether or not the inspectors that we have are adequately trained in the new 135's to perform that inspection service.

I am wondering, from your experience so far, has there been, by region or by your district offices, FSDO's wherever, the kind of training really to deal with the new 135's?

Mr. ROACH. Yes, sir. To speak for the New England region, when the new 135 first came out, Washington headquarters initiated a team of people to go out and train the inspectors and the regions in the field; go through the proposed rule as it was at that time written, make sure everybody understood what it was going to be and how it was going to be promulgated.

Once the rule came out, the New England region—and I am aware now that other regions did the same thing—called in all the air taxi and commuter operators in our district. In New England, this amounted to some 400 people and 184 air taxi and commuters.

We spent 8 days with these people, taking them item by item through the new rule, so if there were any questions at that time, we could resolve them and get them to the point where they understood, before the rule even came out. This was done prior to December 1978.

Subsequent to that, the rule came out, and to my knowledge, there has never been any problem with any of those operators as far as understanding the rule, whether it be an inspector or one of the particular air taxi operators.

We do not feel that our inspectors are not properly trained in any new rule that comes out. We hold training sessions at the regional level, we hold training sessions at the field level. I have specialists who constantly go from office to office, training people on developing enforcement packages, portions of the rule that may be amended, or any other problems that have shown up through our various observations from the regional level.

So I cannot really say that our inspectors are not properly trained prior to the——

Mr. MINETA. Mr. Roach, how many do you have in your general aviation air carrier branch, where you are the chief? How many do you have?

Mr. ROACH. I have five inspectors.

Mr. MINETA. And has that been increased since the new 135's?

Mr. ROACH. No, it has not.

Mr. MINETA. But there is an additional workload being put on the five inspectors?

Mr. ROACH. Well, my inspectors, now, are operating at the branch level. We do not do field work. We have approximately 60 inspectors in the field, and four field offices, not equally distributed.

When the Deregulation Act went through, we could almost estimate a growth, and this was during fiscal year 1978 or 1979. We programed for fiscal year 1981 12 additional inspectors, and it looks like we will get those in 1981, which is about when we will need them.

Right now, we have 13 air taxi operators applying at our Westfield office; we have 8 applying at the Norwood office, in Norwood, Mass., and we have about 10 applying at the Portland office.

Given the time to develop the process and get these people their certificates, this will be about 1981, and at that time, we will have a need for additional inspectors, and we will have the 12 assigned.

So we think we are keeping up.

Mr. MINETA. Mr. Gossen, what about up in Alaska? As a result of the new 8000.176 and the training sessions, what about the workload of your inspectors?

Mr. GOSSEN. Basically, we were briefed on the new part 135, and we receive adequate training in advance of when a new rule comes out.

Mr. MINETA. Mr. Davis?

Mr. DAVIS. We sent both principal operations and maintenance inspectors to Atlanta where they held this Washington meeting on the new 135 and advisory circular which came out later, and we had meetings with every operator in our area. Unfortunately, a lot of operators did not come. But we did call for a meeting. It was a 3-day session, and every inspector in the office sat in on that session. It was a repeat by our own inspectors of what we heard from the Washington team.

Mr. MINETA. Was there any followup on those operators who did not show up?

Mr. DAVIS. Oh, yes. We had personal contact later with them, and we found out we had to work harder with them to get them organized for the new part 135's.

But I would like to add something in relation to staffing, because I have not been asked the question, so I am going to volunteer it. "The Lower 51", which is San Juan, P.R., and the Virgin Islands, we do have a staffing problem, I think maybe greater than Alaska. We do not and cannot attract journeyman inspectors. We are constantly rotating inspectors from an apprentice leaving my office as a journeyman and then starting all over with another apprentice, and he leaves as a journeyman in 2 years.

That puts a drag on the inspectors who are journeymen and who are still there, in more than a one-contract situation. We find it difficult in bidding to get any bids. I am currently allotted 14 slots. One is vacant in clerical, one is vacant in operations. I have four trainee inspectors, leaving just four operating journeyman inspectors, which is a very weak staff as far as training goes, because by the time these trainee inspectors become journeymen, they are going to leave.

Mr. MINETA. Why would they leave San Juan and the Virgin Islands? Those are places most of us want to get to.

Mr. DAVIS. Well, there is some cultural shock that takes place and other things, family reasons, and economics. The cost of living is terribly high. They leave the States, and when they come back and try to resume their natural way of living, they will find that they got left behind, that they cannot even afford to do the things that they would have been able to do had they remained—I am talking about housing. So they are anxious to get back, and we do have a staffing problem in San Juan.

Mr. MINETA. Those inspectors you referred to, how many certificates would they hold?

Mr. DAVIS. Oh, they were assigned the certificates, even if they are an apprentice, but they work under the supervision of a journeyman inspector. They will average about eight certificates each. As to the one vacancy, they are also picking up the work left by the vacancy.

We had a special situation there when the Prinair accident occurred. The division—Atlanta—had placed the principal inspector as his only assignment Prinair, the principal operations and principal maintenance. That threw a little heavier burden on our non-journeyman inspectors. I have just had one leave who was a journeyman, and his position is still vacant.

Mr. MINETA. How many planes does Prinair have?

Mr. DAVIS. Prinair currently has 25.

Mr. MINETA. The principal operations inspector, let us say, on the Antilles, has how many other certificates?

Mr. DAVIS. Aside from Antilles, he has seven.

Mr. MINETA. And how many air taxi operators?

Mr. DAVIS. They are air taxi operators; seven others.

Mr. MINETA. Are any of the seven commuters?

Mr. DAVIS. Three of them are commuters.

Mr. MINETA. What about the Houston area? One of the things we heard, I think yesterday, from Mr. Howe, was that the difference in application or interpretation of some rule in Houston as compared to San Antonio—and I think he cited an example of starting an engine—Mr. Ellis, do you have any comment on that, as far as again, from staffing, training for the new 135's and just generally interpretation from within the Houston area from one area to another?

Mr. ELLIS. As far as the differences between San Antonio and Houston, he was not very specific. He said starting the engines, but I do not relate to that incident at all. I do not ever remember it coming up. There may have been something that Mr. Howe had somehow or another come in contact with through one of his pilots that we may have done on our individual ramp inspection or our en route inspection. I really do not recall hearing about that. I could not really speak to it myself.

As far as training, yes, we had similar examples to the other three gentlemen that spoke. It was kind of a nationwide kind of thing. And then within the office itself, we held individual training sessions with the operations section and the air taxi specialists in the office, working up some information, and we would have little groups to do that. During the actual recertification of the air taxis, we had a group of three or four people that ordinarily dealt with the recertification of the new 135's so that the other inspectors could primarily deal with the ongoing problem. In other words, while they were in the process of recertifying, they still had to remain under the old 135, so we had people doing both.

Mr. MINETA. Has a surveillance handbook for the new 135's been put together?

Mr. DAVIS. It has not reached the field yet.

Mr. MINETA. It has not reached the field; it has not been finalized.

Mr. ROACH. It was distributed last week.

Mr. MINETA. It has been now distributed to the field?

Mr. ROACH. Yes.

Mr. MINETA. And how long did it take to get the new surveillance book finalized; do you have any idea?

Mr. ROACH. It must be a year and a half. Well, let me say from the time the rule was written, close to a year and 4 months.

Mr. MINETA. One of the other complaints we heard was the fact that inspectors are on general aviation as well as on commuter air taxi operators, and that they are two different fish, two different kinds of operations, and whether or not that inspector can really do this as well as over here. Is that a legitimate complaint?

Mr. ELLIS. Not all inspectors are qualified in all types of aircraft, that is true. There is a point at which you cannot train everybody

to do everything in an office because of the exorbitant expense of training people in certain types of aircraft.

I do not know if that is a for instance, but you cannot qualify everybody on certain types of turbine-powered aircraft.

Mr. MINETA. Well, if they are not current, Mr. Ellis, are they checking pilots?

Mr. ELLIS. No, sir.

Mr. MINETA. They are not.

Mr. ELLIS. Now, whether they are current, I would not be able to speak to that. They would have to be qualified in that type of aircraft.

Mr. MINETA. Mr. Levitas, do you have any questions?

Mr. LEVITAS. Yes. In your dealing with pilots who do work for commuters, do you ever get any sense or expression that they are being pushed to the limit by the operators or that they have some complaints that some of the operating policies are inconsistent with their concept of what would be good for safety?

Mr. ROACH. They certainly are.

Mr. DAVIS. Yes, sir.

Mr. GOSSEN. Yes.

Mr. LEVITAS. I see all four of you nodding your heads. I wonder if each of you could elaborate on that, just in a few words.

Mr. ROACH. OK. We got wind of this through a visit of a pilot to one of our field offices a few years back, and it also came out as a result of the Downeast accident.

Once we become aware of a thing like that, we immediately contact the management people and discuss it with them. As a matter of fact, in the New England region, once that accident occurred, the regional director, the deputy regional director, the fliqht standards division chief, and the assistant division chief each personally divided into two teams and visited each air taxi management to discuss that specific item. It took them over a month and a half to complete all the business. But they sat down with the management people and discussed that specific subject. It is not a regulatory area as far as the FAA is concerned. If we determine that it is true that the management did say this to a pilot, the only thing we can do is counsel the management and advise them that it is contrary to safety practices to do that kind of thing.

There is no way we can take any other type of action. If the pilot in fact does break the minimum, of course that is something different. We could never get any of the pilots in any one of the organizations to admit that this was true, or that they had been pressured, that they had busted minimums. They all claimed that they had adhered to the policies to the letter.

So, based on that, the only thing we could do was visit all the operators, counsel them, advise them about our desires on safety consciousness and just increase our surveillance.

I have spent weekends hiding in the woods near an airport with a VHF radio on, listening to company frequencies to try to pick up things that were not consistent with our desires, and we could substantiate nothing.

Mr. LEVITAS. Mr. Gossen?

Mr. GOSSEN. The complaints I receive most frequently concern pilot working hours and number of hours flown per month. Mr.

Ellis stated earlier that commuters in his area average, I think it was about 70 hours per month. I cannot say that for the operators in the Alaska area. I think a more realistic number is they push them right up to 100 hours. And they will many times be scheduled very close to 14 hours on duty.

It will become more of a problem as the hours get longer or the daylight becomes more during the summer months, because some of the airports are restricted to daytime operations only, so as the days get longer, the operators' schedule will increase and the pilots' duty time increases, and the number of hours flown per month increase. In the summer months, they have flown more than 100 hours, and 120 in the past have not been uncommon.

Mr. LEVITAS. Mr. Davis?

Mr. DAVIS. Yes. A few months ago, a chief pilot and four of his pilots came into the office and said they had just resigned from a full cargo air carrier. The reason they gave is that the company was insisting they not write up maintenance findings or pilots' logs in between the start of the flight day or the end of the day because they were grounding airplanes. This was verified, and the airline was suspended for 15 days.

Mr. LEVITAS. Mr. Ellis?

Mr. ELLIS. We have had similar allegations to what you have just heard about maintenance discrepancies. I think that has probably been the major complaint. Every now and then, they will talk about the rest periods being too short or something, but generally, it is the fact that the discrepancies may not have been taken care of, and we have had maintenance inspectors follow up on it and take the correct enforcement action.

Mr. LEVITAS. The problem is, of course—except in the rare situation where the pilots have resigned rather than continued—that many of these people are totally dependent on that employment. They do not want to lose their job, and they know that if they complain, they will probably get kicked out. So therefore, they may be reluctant—I suppose in the government, we call it whistle blowers.

Do you think it would be useful to establish some type of hot line system where pilots with commuters who have those economic pressures being exerted on them could call in and anonymously report, call to the attention of FAA, the type of pressures that they may be subjected to and would give them some ability to report these without at the same time placing their own jobs on the line?

Mr. DAVIS. This intelligence would be excellent, but most times they in turn are subject to a violation if they are involved in an illegal practice or they have committed it. So they are reluctant even to mention it.

Mr. ROACH. But they have that authority now, Mr. Congressman. We receive anonymous letters from John Does and Sam Smiths pointing out deficiencies, and we still investigate those, not knowing who wrote the letter, and investigate the system entirely and try to substantiate it.

Mr. LEVITAS. You do get that type of input, though.

Some of the problems which FAA inspectors encounter have already been addressed in response to other questions, but let me ask you about a few others.

It has been said that some of the economic pressures on the operators rub off on the inspectors. Have you had any experience with that?

Mr. ROACH. I wonder if you could define that a little—economic pressures?

Mr. LEVITAS. Some of the things, that because the commuters feel subjected to economic pressures and try to move closer to the minimums to avoid planes being grounded, to overwork crew, that FAA inspectors tend to become cognizant of that and take those considerations into account themselves.

Mr. ROACH. I am not aware of that at all.

Mr. LEVITAS. None of you have found that. OK.

Somebody mentioned the lack of training that FAA inspectors receive. How much flight time do inspectors get each year in aircraft in which they give checks?

Mr. ROACH. Actual time at the controls?

Mr. LEVITAS. Yes.

Mr. ROACH. That would vary by type aircraft. We do have a program in the agency where we are authorized, for currency and transportation purposes, to rent aircraft in order to get about the area and perform our functions. Depending upon the size of the area, the amount of money available, the availability of the aircraft, it would vary from region to region, almost.

As far as compulsory training, each pilot that is qualified in a particular type airplane is required to complete recurrent training, on a semiannual or annual basis, depending upon his particular work functions.

Mr. DAVIS. We are not referring to large aircraft, and I budget for 20 hours per pilot for maneuvering the flight controls as pilot in command. Sometimes, we never get the 20 hours because of workload, but I budget for 20 hours. When it comes to type ratings in large aircraft, that kind of training is arranged for by the regions, and that is given.

Mr. LEVITAS. Some inspectors have said that one of the reasons they are under time constraints is they are spending so much time in producing unproductive paperwork. Have you heard that?

Mr. DAVIS. That is true.

Mr. GOSSEN. Yes.

Mr. ROACH. That is a valid complaint. Every inspection requires some type of followup paperwork, whether it be a ramp inspection, base inspection, en route inspection, flight check. Whatever we do has to be substantiated with some type of a document, and the followup paperwork becomes excessive at times.

Mr. LEVITAS. And would that be the experience that the rest of you have had as well?

Mr. DAVIS. I would estimate that it takes at least 30 to 40 percent of an inspector's time to cover paperwork demands. I would say it takes another 15 percent or 20 percent for pop-ups that come into the office and take inspectors' time, which is not producing good results, and you cannot get rid of them. Some of them like to talk for hours. So the field time is very low by comparison to what we think it should be, for that reason.

Mr. ROACH. We are in the process of attempting to rectify that somewhat. We are attempting to use dictaphone items for the

inspectors to carry in their pockets, so when they do an inspection, they can record the inspection via dictaphone and then file the belt, which saves an awful lot of writing. In addition to that, we are looking at word-processing equipment for routine report filing and that type of thing.

Mr. MINETA. Would the gentleman yield?

Mr. LEVITAS. Yes.

Mr. MINETA. Is that for the region, or is that——

Mr. ROACH. This is just for the New England region. I am sure there may be other thoughts in the other regions that these gentlemen may or may not be aware of.

Mr. GOSSEN. Well, we do have, like I said, a check list for each inspection that we conduct, and many times, all we have to do is fill in the blanks, and that does save some time as far as paperwork goes. However, there is a tremendous amount of time spent on paperwork.

Mr. MINETA. Thank you.

Mr. LEVITAS. It has also been suggested that FAA seems to give a better deal to air traffic controllers than to inspectors and that creates problems for inspectors.

Mr. ROACH. I think the problem there is the Civil Service itself, the grade standards, the public laws that support the civil service structure. I do not think the FAA has any control over that.

Mr. LEVITAS. Aside from the salary and civil service grades, what about things like free travel passes, second career training, night bonuses, things like that.

Mr. ROACH. Free travel passes? You mean the SF-160 program—oh, familiarization flights. Well, from what I understand, the air traffic system provides this familiarization flight for the air traffic controllers to make them familiar with the other side of the system.

It is one thing to be in a control tower or in an air traffic control center for 15 or 20 years of your life, giving instructions to a pilot in an airplane, and not completely understand what his problems are on the other end.

So this system was developed, and it is called the 160 program, so that the air traffic controllers could ride the jumpseats when we are not using them, to observe the other end, to see what kind of problems a pilot has. For example, when you say "Descend 15,000 feet in a 5-mile distance," it is almost impossible unless you go into a screaming power dive. So this has helped understanding between the two factions, the ground control, the air traffic controllers, and the pilots.

Now, since they get familiarization flights, I am sure they can see no reason why, at the end of the familiarization flight, if they wind up in Chicago or San Diego or San Antonio or Las Vegas, why they cannot take annual leave and spend some time there, and take another familiarization flight back.

I am sure this is some of the understanding, and from what I understand, there is nothing illegal about that kind of an operation.

But to call it a free travel pass, I do not think that was the intent.

Mr. LEVITAS. I am sure, based on what I have read in the press today, that this committee will be spending some time later this year and next year, getting to know a lot more about the air traffic controllers' activities.

Mr. MINETA. Is there a contract coming up pretty soon?

Mr. LEVITAS. According to the press report today, their contract comes up in 1981. They are putting together a $3 million strike war chest; instead of going to flow data, they will have a strike. But I guess that is sufficient for another day.

Thank you.

Mr. MINETA. Mr. Davis, you talked about your apprentice going to a journeyman status. How long does that take?

Mr. DAVIS. I can speak for my office because the exposure is so great in air taxi and most other activities. Two years; when he leaves, he is a journeyman.

Mr. MINETA. Now, is that 2-year standard within FAA?

Mr. DAVIS. Well, these are new hires I just mentioned to you. They are apprentices or even probation employees. After completion of indoctrination, and one or two courses in Oklahoma City, and the experience they gain in my office, they leave as journeymen. And it is a 2-year process.

Mr. MINETA. And Mr. Roach, you said you are going to be getting, hopefully, how many for 1981?

Mr. ROACH. Ten more inspectors.

Mr. MINETA. Ten more. So by the time the selection process is made, and you get this—I assume they would be new people, they will be apprentices?

Mr. ROACH. They will be inspector trainees, yes, sir.

Mr. MINETA. Inspector trainees. By the time you get them trained, how long before you can really put them out into the field as inspectors, or is it an on-the-job kind of thing as you are going along?

Mr. ROACH. We give them on-the-job training. We also schedule them for the basic indoctrination course, which is a mandatory item, followed on by the flight training and flight qualification phase. Depending on how soon we can get these things sequenced, it could run anywhere from 90 days to 1 year.

In the meantime, we do give them on-the-job training, train them in those areas that they can function, and relieve some of the other qualified inspectors with some of the routine kinds of duties.

We can do that within the first 60 to 90 days, and have somebody that we can use with some limited capability. But normally, 90 days to 1 year, and we have a fully-trained inspector, if you can get him through the required training course.

Mr. MINETA. And have you, as the branch chief, been notified now as to when these 10 will be coming onboard?

Mr. ROACH. Not specifically, no. I know it will be fiscal year 1981.

Mr. MINETA. So it will be sometime after the first of October, but you do not know when.

Mr. ROACH. Right. We do not know exactly when right at the moment.

Mr. MINETA. Any questions, Doctor?

Dr. TYMCZYSZYN. No questions.

Mr. MINETA. Again, gentlemen, I want to thank you very, very much for being here. Mr. Davis, the snow here is specifically for your benefit. We hope that you might be able to appreciate San Juan much more. Tell the others down there in the lower lower three that there are some advantages of being in that area.

But I do want to thank all four of you for your observations. This is, again, another step in that foundation that I spoke about that we are trying to build, as far as our own level of knowledge about the whole area of commuter aviation safety. So I do want to thank you very, very much for helping us get to be more knowledgeable about this area.

Again, I know your work from our perspective is very important, as well as to the traveling public, and I want to thank you very, very much.

The subcommittee will stand in recess until 10 a.m. tomorrow morning, room 2167, and the Administrator, Mr. Bond, will be our witness.

[Whereupon, at 1:15 p.m., the subcommittee was recessed, to reconvene Friday, February 29, 1980, at 10 a.m.]

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COMMUTER AIR SAFETY

FRIDAY, FEBRUARY 29, 1980

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON OVERSIGHT AND REVIEW,
COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10:10 a.m., in room 2167, Rayburn House Office Building, Hon. Norman Y. Mineta (chairman) presiding.

Mr. MINETA. For the last few days we have heard considerable discussion relative to the safety record of the commuter aviation industry.

The Safety Board, a panel of commuter operators and finally a panel of FAA inspectors who work closely with the commuter industry greatly enlarged our understanding of the many and varied duties they have in connection with supervision of the commuters and air taxis assigned to their regions. The record to date clearly reflects there have been weaknesses in the supervision afforded to this industry, some attributable to its rapid growth, some to the understaffed and overworked inspectors, some probably because of poor communication between the FAA and the industry operators, and obviously some due to the management attitude of a few operators operating in marginal areas of safety.

This morning we are very pleased to hear from the distinguished FAA Administrator, Langhorne Bond, as to the action he has taken to date in an effort to bring about a more effective supervision of the commuters, both for the purpose of assisting them to comply with the new regulations contained in part 135 and to enhance the traveling safety of all air travelers.

Mr. Stangeland, do you have any opening remarks?

Mr. STANGELAND. I have none.

Mr. MINETA. Mr. Bond, we are pleased to have you with us, and we have a copy of your statement which will be made a part of the record.

You may go ahead and proceed in your own fashion. But prior to doing that, if I could ask you and others who may be testifying this morning to be sworn in.

Do you swear to tell the truth, the whole truth, and nothing but the truth, so help you God?

Mr. BOND. I do.

Mr. FOSTER. I do.

Mr. ONSTAD. I do.

Mr. MINETA. Thank you very much.

Mr. Bond, if you would go ahead and proceed.

TESTIMONY OF HON. LANGHORNE M. BOND, ADMINISTRATOR, FEDERAL AVIATION ADMINISTRATION, ACCOMPANIED BY CHARLES R. FOSTER, ASSOCIATE ADMINISTRATOR FOR AVIATION STANDARDS AND CLARK H. ONSTAD, CHIEF COUNSEL

Mr. BOND. Thank you, Mr. Chairman.

It is a pleasure for me and all of us to appear before this subcommittee. On my left is Clark Onstad, our Chief Counsel of the FAA, and Chuck Foster is on my right. He is the Associate Administrator for Aviation Standards, Mr. Safety, in the FAA, if you will.

I appreciate the opportunity to appear before you today on the subject of commuter airline safety. We welcome the subcommittee's continuing interest in promoting aviation safety, and seek your views on ways that the safety record of the commuters can be improved. Improving the commuter safety record has been one of my main priorities since first taking office, and it has occupied much of my time ever since.

The commuters safety record, though improved somewhat in the last 6 months or so, has not been good. Not only does it not stand up well to the record compiled by the trunk air carriers, but it is not in any way comparable to the record achieved by the local service carriers which provide the kind of short haul service most nearly like that offered by the commuters. Though it may be possible to explain away some of the differences in the safety records, and I have certainly heard a number of justifications offered, I do not think we can afford to accept those excuses. It is important that we not lose sight of one plain and simple fact—under any set of rational guidelines, the safety record compiled by the commuters is not acceptable. You will find attached to my prepared statement a brief statistical breakdown of that safety record.

I should mention that we recently analyzed the 180 commuter accidents which occurred from 1975 through 1978. That study showed that a clear majority—nearly 57 percent—of commuter accidents resulted from pilot error; such things as inadequate preflight planning, fuel mismanagement and the like. Roughly 21.5 percent of accidents were attributed to mechanical failures; almost 11 percent to errors of nonpilot personnel associated with areas such as maintenance, operations, production-design; the remaining 11 percent were attributed to a variety or other factors such as weather and midair collisions. I believe you will find our commuter safety program—providing increased surveillance, more stringent operating regulations, tougher enforcement, and improved equipment—is well designed to prevent the kind of accidents we have experienced in the past.

The need to significantly improve the safety record of the commuters is brought home to us all when we look at the tremendous growth that has been experienced in the commuter industry. Much of that recent growth can be attributed to the economic deregulation of the airline industry. But even before the Airline Deregulation Act, the commuters were taking on increasing importance in our national air transportation system.

Recognizing the prominent role the commuters were going to play in our system, and the pressing need to do something about

their safety record, one of the first issues I addressed as Administrator was to revamp the operating regulations for the commuter carriers. That effort, which I am told was the biggest regulatory undertaking in the FAA's history, resulted in a new part 135 of the Federal Aviation Regulations. This action has bolstered significantly the rules under which the commuters operate, strengthening such areas as equipment requirements, pilot proficiency, and maintenance programs. Final certification of the commuters under these stringent requirements was completed a little less than 3 months ago, so it is still too early to see their full impact, but I assure you they will go far toward helping the commuters achieve a level of safety approximating that of the certified airlines.

Issuing rules, though, is only part of the equation. Rules do not do a bit of good unless they are followed. For that reason, a key aspect of the implementation of these new rules is a 1-year program of intensified surveillance of all phases of the commuters' operations to see that the rules are fully complied with. During the period July 1 to December 31, 1979, for the 280 passenger-carrying commuters certificated under new part 135, we accomplished the following actions under our surveillance program: 1,775 proficiency checks of pilots in command; 288 reviews of ground and flight training; 1,087 en route inspections; 198 reviews of operators' approved weight and balance programs; 1,577 ramp inspections of aircraft; 723 spot inspections of aircraft; and 130 reviews of operators' maintenance training.

These statistics take on added meaning when you consider that a number of the commuters were not certified under the new rules until the latter part of this 6-month period, and thus were not covered by the special surveillance program for much of the 6-month period. This kind of close scrutiny will continue for each operator for at least 1 full year after its certification under the new rules. There is nothing magic, I might add, about the 1-year life of the program, though. To the contrary, the program will remain in effect until I am satisfied that things are much improved.

I also determined that there was a need to do something about the design standards the aircraft operated by the commuters meet.

Our existing part 25 certification standards did not really fit aircraft in the commuter-size range and I concluded we needed something more stringent than the part 23 standards which are applicable to general aviation aircraft.

Therefore, we are developing new regulations for the certification of commuter-sized aircraft. These standards will be incorporated in part 24 of the Federal Aviation Regulations and should lay the foundation for modernizing and improving the structural and mechanical integrity of the commuter fleet of the future. In so doing, the inherent safety of the aircraft used by the commuters will be enhanced.

With respect to the equipment used by the commuters, we have already guaranteed loans of $20.9 million for 7 commuters this year for new equipment, and have in process 11 additional commuter requests for loan guarantees totaling $38.3 million.

I should also note that I am encouraged to see some positive movement in the manufacturing industry to develop and build new commuter-sized aircraft. Fairchild, for example, has announced

plans to enter into a joint venture with Saab-Scania, a Swedish firm, to design, develop, and produce a new generation commuter aircraft for 30 passengers.

Beech has under development a 19-passenger commuter aircraft, referred to as the Beech 1900, which is a stretched version of the Kingair 200. Further, they have announced that they are studying the development of a 30-passenger aircraft as a next step.

Gulfstream has under development a stretched version of their turboprop Gulfstream 1 which would carry up to 30 to 40 passengers in commuter service. Revitalizing the commuters' aircraft fleet will be a key step in improving the overall safety of the commuters.

In addition to seeking ways to strengthen the regulations governing the commuters, I have taken action to improve the FAA's internal processes. One major action was the creation of the position of Associate Administrator for Aviation Standards, which provides the central direction over many of our aviation safety programs, thus offering greater coordination of safety programs than in the past.

With respect to commuters, responsibility at headquarters has been moved from the division responsible for general aviation safety to the division concerned with airline operations. This was done in recognition of the fact that the commuters are operating as scheduled airlines, and all those who carry passengers in scheduled service should be treated the same.

I believe all the members of the subcommittee are aware of the FAA's intensified enforcement program which I announced last March. We have put the entire aviation community, including the commuters, on notice that we will not accept laxity in following safety requirements, that we will not permit the public safety to be jeopardized by those who would seek to maximize profits at the expense of safety.

We have not hesitated to impose unprecedented civil penalties on those with unacceptable safety practices, nor to suspend or revoke their operator's certificate when warranted. Those efforts will continue. I intend to foster an environment in which the people upon whom the public safety depends expect to be held accountable for their actions. And the only way I know to do that is to hold them accountable.

I believe that the Congress fully expects the FAA to take firm action to deal with commuter safety. That message was sent to me in the Airline Deregulation Act of 1978 which spoke in terms of insuring that all classes of air carriers provide the highest possible level of safe, reliable air transportation. I have interpreted that legislative mandate to apply to all facets of the commuters' operations, including security requirements.

Responding to that mandate, and in recognition of the increasingly prominent role of the commuters which are using larger aircraft and assuming service formerly provided by the certified carriers, we have recently proposed new security requirements for the commuters. The proposal envisions multilevel security requirements tailored to the different types of commuter passenger operations, and is intended to achieve degrees of security comparable to what is now provided passengers using the certified carriers. That

regulatory proposal has evoked a great deal of concern, including concern from some Members of Congress. I assure you that we expect to be reasonable in promulgating any final rules in this area.

An important way in which members of this subcommittee can let it be known that they support a tough enforcement posture to promote aviation safety is to seek early action on a key legislative initiative of the Department of Transportation. That legislation, which has just been transmitted to the Congress by the Secretary, does two things that will go far toward promoting an increased concern for compliance with our safety rules.

First, it would increase the maximum civil penalty for a violation of the Federal Aviation Act of 1958, or regulations issued thereunder, from $1,000 to $25,000. The present $1,000 level has been in effect since 1938. What used to be a severe economic deterrent has now eroded to the point where it can easily be accepted by an operator as a cost of doing business.

Second, the legislation calls for criminal sanctions for violations of title VI of the Federal Aviation Act of 1958 or regulations issued thereunder. This would have the effect of providing criminal penalties for violations of the FAA's safety regulations, thus putting them on the same footing with the CAB's economic regulations which have had the added deterrent of criminal penalties for some time now.

I think all would agree with me that we should place no less emphasis on seeking compliance with safety regulations than we do on compliance with economic regulations. In fact, I would note that it was the Department of Justice that first brought the need for such criminal penalties to our attention. They became concerned when persons committing flagrant safety violations endangering human life could only be subjected to civil penalties, while the same kinds of dangerous activities in an automobile, for example, could be prosecuted criminally.

Let me elaborate a little on this legislation. I believe it is important for the Congress to understand that the authority we are seeking to assess penalties up to $25,000 is for what you would call the worst case scenarios. Under our current civil penalty scheme, providing a maximum $1,000 penalty per violation, we typically do not impose penalties for the full amount authorized by law.

In the vast majority of cases, a civil penalty of $100 or $200 is all that is warranted by the circumstances; in fact, in many cases we apply administrative sanctions, such as a letter of warning, rather than imposing a monetary penalty. We fully expect to continue that practice. But there arise situations in which an unscrupulous operator—I believe you are all aware of the circumstances in "cockroach corner"—will consciously balance the cost of complying with our regulations with expected profits and make the choice that jeopardizes public safety. We have also found cases where air carriers have chosen to dispatch aircraft rather than making needed repairs.

At the same time as we seek increased civil penalty authority, we are proposing legislation that will make it easier and less awesome for most persons against whom civil penalties are assessed to challenge the FAA's actions. We are proposing in our bill

that civil penalties under $10,000 can be assessed by the FAA only after an opportunity for an informal conference. After that, the FAA's decision to seek a civil penalty can be appealed to the National Transportation Safety board, in the same manner that certificate actions are handled today. Before the NTSB, the person against whom the civil penalty is assessed would be entitled to a full hearing by an administrative law judge. The decision of the administrative law judge could be appealed to the full Board, and thereafter to the courts of appeal.

Today, civil penalty cases are tried before the U.S. district courts. It is apparent that for most a court trial is more costly and intimidating than an administrative hearing. Our proposal would change that situation, except for civil penalty actions above $10,000, or in cases where specified, additional circumstances are present such as the need to seek injunctive relief at the same time.

I would like to discuss for a moment the criminal sanctions we are seeking. As I said before, these criminal sanctions would attach to violations of our safety regulations, the safety provisions in title VI of the Federal Aviation Act. The criminal sanctions would consist of a fine not to exceed $25,000 or imprisonment not to exceed 1 year, or both. These criminal sanctions would apply only to those persons who are proven to have knowingly and willfully commited a violation.

Frankly, as in the case of most criminal statutes, though, I expect it would be the exception that someone would be prosecuted under this new authority. But the possibility of a criminal penalty should give people pause, and should provide us with an added deterrent to complement the increased civil penalty authority. One kind of case that comes to mind where this penalty could effectively be applied is against those persons who manufacture and distribute bogus parts for aircraft.

Again, I want to emphasize that our legislative proposal is intended to meet the worst-case situations that arise. No doubt there will be many in the aviation community who will express their serious concerns about the legislation before you; but for the overwhelming majority of them there will be no change from the way they interact with the FAA today, except that they will be provided a simplified means of contesting civil penalties which may be assessed against them by the FAA. Thus, the legislation, rather than being detrimental to the aviation community at large, should prove beneficial. I can assure you that its enactment would prove beneficial to the safety of the traveling public.

In summary, Mr. Chairman, I want to again express my appreciation to this subcommittee for calling this hearing to focus attention on the safety of the commuters. Commuter safety is a problem which merits our concentrated attention. The FAA has taken so far a number of positive steps to improve the safety record of the commuters, and we will continue to take whatever action is warranted.

On that point, I should mention that, when a recent examination of commuter accidents revealed situations in which pilots had limited experience in the specific kinds of aircraft flown at the time of the accident, I promptly issued a rule to take effect without comment and public procedure to correct that deficiency. You have my

assurance that we will continue to take such decisive action to protect the public welfare.

We seek your continued support in working with the FAA not only to better the record of the commuters, but to improve all facets of aviation safety.

Mr. Chairman, that completes my prepared statement. We would be happy to answer any questions that you might have.

Mr. MINETA. Thank you very much, Mr. Bond.

Mr. Bond, in the analysis of the 180 commuter accidents, and when you compare them with those accidents of the 121 operators, do you find any kind of cause that is attributable to accidents as sort of a common denominator?

Mr. BOND. I would like to associate myself with the remarks that Chairman Jim King made before this subcommittee earlier in the week, which were in turn made before the Safety Board by Chuck Foster, before that, and that is that the key element that we find is attitude. Personal commitment to safety. Jim said that solvency of the carrier was not the determining factor.

We found carriers that were solvent in making money, and that were not driving toward safety, and similarly, we found those who were in poor financial shape that were very conscientious on the subject. It can be reversed, of course. But the main thing, we believe, is attitude. Commitment to safety.

That is the common thread. This committee has examined the Chicago DC–10 crash, and has before it the Cyrocki report on the maintenance of the DC–10. Surely there can be no greater example of a sound air carrier with competence, but which did not apply the full safety attitude in that particular case.

Mr. MINETA. Let me digress for just a minute, and follow up on that.

With regard to management and how much commitment they have to it, it seems to me that the FAA has two roles. One is in terms of enforcement, and in terms of the enforcement role it can have two functions. One in terms of the police officer, and the other in terms of the assistance.

Another part is the consistency in interpretation of rules, whatever region you are in. One of the things that we have been hearing, at least in the term of these hearings, is first, inconsistency and, second, the kind of less than helpful approach from FAA's perspective, in dealing with the operators.

I am wondering if you could comment on that.

Mr. BOND. I guess that less than helpful might be a punitive rather than coaching attitude. We try to strike a balance, Mr. Chairman.

You certainly pointed out the dilemma for us, and I think the way you have stated it illustrates the balance between regulatory and professional responsibilities that we have.

From our point of view, promotion means more safety, and therefore approaching on safety, helping safety as well as tough enforcement is the best way to promote. When I made my tough enforcement speech last March, I pointed out that the FAA, I thought, had been too much coach, and not enough cop in this relationship, and that we were trying to shift the relationship over to a better balance. Not that we were trying only to be cop.

We have made every effort that we know how to, to be both. Our attitude in the field is, we know the regulations are tough, they are complicated, and the carriers are not, in the past, associated with this kind of complexity, and we have tried to get the carriers up to the level, without penalty, in every case, to get them up to the level that we would expect.

But I will admit to you that we have to balance the two apart, and there is the perception out there that we are too much cop and not enough coach. I do not believe that that allegation will stand up to analysis.

I think that you will find, Mr. Chairman, that we have tried equally to be both. I think the comment is perhaps a little sensitivity on the part of the commuters, but whenever we have seen these specific allegations we have found that there have been visits by the carriers that we have tried to show them how to operate in a nonenvironmental area, as well.

Mr. MINETA. Let me take that scenario a little further.

First, the interpretation of the regulations by regions, and then the overload of the inspectors that may have, let us say, 32 air taxi operators, and 4 of them are commuter operations. We had one of the operators here with, let us say, 18 binders of their operating manuals which were needed to comply with the regulations. Now that inspector has to be able to be familiar with not only the FAA regulations, but with the operating manual of each of these commuter operators. With respect to the regulations, each of these companies is going to have a different set of manuals, based on the nature of their own operation.

So, first of all, what about the instance of the overload of inspectors, given the fact that in 1978, I believe it was, you were going to be cutting back 120 inspectors. I do not know whether that went into effect. Maybe you reversed yourself, and then in 1979, actually added some more inspectors.

I am just wondering, given the template that the inspectors have to work against, and from your role as Administrator, what about the roller coaster number of, or lack of, inspectors in the field?

Mr. BOND. Well, the budgetary decisions that I have made in regard to personnel have been roughly as follows. We have done our best to reduce overhead personnel. People who are working in regional headquarters, people working in our national headquarters here. Incidentally, our employment in FAA headquarters, in the 1981-82 budget, will pull our employment below 2,000. It was close to 3,000 in headquarters when I took over. I hope to continue the reduction in cost of the overhead of the FAA. That has been coupled with constant employment in the air traffic safety area, no change downward, but some modest employment upward among the controller work force.

I do not know of any reduction that we have planned in the inspector work force. We have tried to hold it constant until the budgets that are now before the Congress will call for an increase, as you alluded to. So we have not tried to make a roller coaster situation.

We do have a problem that may impact on employment, as opposed to what we would target as the actual problem. Our inspector work force, by any standard, is very old. The average is 52.

It is an odd circumstance, I find, that the civil service standards that are used for hiring people—they are hired through the civil service system, and not by us as such—have given heavy premium to high-time pilots, and also some preference to military people, as well. As a result, using the civil service roster we have had to take former military pilots, retired, and very few women, and very few younger people, and it has caused us a difficult logistical problem. Not that the people are not competent, they are very good. But when we get someone 50 years old, and we know that they are going to retire at 58.

It takes a few years to get up to inspector, so they work 4 or 5 years for us, and then they retire. We have a high and troubling degree of turnover, and we have a work force age we would like to see evenly distributed, and we would like to get many more years out of our work force than we are getting.

We are working on this problem, but it is tied up in civil service regulations and OMB. It is an odd contrast to the policy that the Congress has imposed on us in our controller work force. Both of them are high demand jobs, pilots and controllers. We are not allowed to hire anyone over 30 years old as a controller, because the Congress has said it is a young man's game. So we do get a long life out of our controllers.

Mr. MINETA. And they retire at 55.

Mr. BOND. And they retire relatively early. So we hire all young people as controllers, and old people as pilots and inspectors. I cannot see the logic behind that. It is a problem for us, but I did want to point out for the committee, the Government is very hard to understand, and these things crop up all the time.

Mr. MINETA. Let me ask about this reduction in overhead in FAA headquarters.

Mr. BOND. Yes.

Mr. MINETA. Are you doing that to get the visibility down in Washington? And then get that overhead out into the regions? If you are doing that for decentralization purposes, what happens to consistency among regions, as far as enforcement of a given regulation?

Mr. BOND. Well, the question is, Why are we doing it, first? Under Najeeb Halaby, who was the second FAA Administrator, our agency adopted a highly decentralized posture, a little FAA in every region, and it was highly redundant.

I believe that the folks close to the problem ought to run the thing, and here in Washington we do not have all wisdom and we do not know all the circumstances as well as the people in the field.

The trouble with that deal was that Washington headquarters was not stripped down correspondingly. This is a Government story you hear everywhere, it was decentralized. So we ended up with multiple layers of review, and redundancy in headquarters, that I believe is unsound managerially. I believe we will get quicker decisions if we ship down people here in Washington to the field offices.

We will be down to 33-percent reduction in Washington by the time this program is over, and I am using the end of the Carter administration No. 1.

Mr. MINETA. Is that 4 months, or 4 years and 4 months?

Mr. BOND. That was Carter 1. We will be working on Carter 2—the next bite that will be taken anyway. If you figure that the overhead cost of a person, counting pension and benefits, is $50,000 or $60,000, and that is a likely number, assuming a reduction of 1,000 people would mean a savings of $50 to $60 million, in that range, per year. That is a significant cost savings.

Mr. MINETA. Where does that savings come from?

Mr. BOND. It would come from reduction of personnel costs.

Mr. MINETA. But all you are doing is transferring the money?

Mr. BOND. No; no, I wanted to touch on that. In achieving this cost reduction in overhead here in headquarters, the FAA has not laid off one single person. All of this business that you hear, "You cannot reduce the Federal work force," in my experience, is now wrong, and we have clearly demonstrated that in headquarters, in FAA. Not one person has been laid off or fired.

Many people have chosen to retire. They are retiring all over the place. So attrition has helped.

We have had freezes, and in addition, we have encouraged, and given preference to people who want to move to the field when a job outside of Washington opens. We have not moved people out into jobs that have been created. When an opening comes about in the field, in a tower, or somewhere else, we have given preference to headquarters people to move out there. So there has been no shipment of people to the field to create jobs there.

We have just used the existing vacancies, and the dynamics of our situation to gradually move people, over time. As a matter of fact, the employment in our regional headquarters, as opposed to the line jobs, has also gone down, but more modestly than our headquarters here in Washington. But nobody has been laid off, nobody has been fired, and there has been a real reduction in overhead forces.

Now, you then touched on the question of consistency.

Incidentally, one more thing.

So far as I can tell there is nothing that we did before that we are not doing now in headquarters, with lower staffing. I have asked the question repeatedly, and in fact, in the regulatory area, you can clearly see that we have the most vigorous ruleout program in the agency's history. Part of it being the commuter program, and we certainly have not lost anything, at least in this area. We have gained.

Now, in terms of consistency of rules, to the field, that is a significant question. It is tough. Given the decentralization that our agency has had since Najeeb Halaby's days, this raises problems in the application of the rules. It is inherent in that.

No one can quite think up the same application of every rule. So we have to be conscious of that problem. We try in headquarters to resolve those inconsistencies as a central force whenever we can. It is not perfect, but I think for the most part we are making progress on it, and we do our best.

Mr. MINETA. As you, through attrition, fill these slots in the regions, and reduce the work force here at Central, partially to decentralize, which I commend you for, are you just adding to the regional overhead? How is that dwindling down to the person on

the ground who has to really do the work, on all of the inspection service, especially when it comes to Flight Standards Division? This is really where we are trying to concentrate our efforts right now?

Mr. BOND. Quite right. I think in terms of staffing it should have no effect. We have kept our work force steady, and now are adding 150 inspectors. So the number will be going up.

But I would hope it would not reduce their ability to do the job at all on the firing line. We have moved the headquarters people, for example, in many cases, to regulatory jobs in the field. Not just to headquarters. Many of our air traffic people are now serving as tower chiefs, or deputy tower chiefs in the field, and I have run into many of them who have told me how much better they like it, for example, better in San Jose, than they do in Wahington

Mr. MINETA. That is understandable.

Let me touch on something in your statement about maybe you played not enough cop, and too much coach, and that you are trying to reverse this, and play more cop and less coach.

At the same time you have sent us the new proposed legislation to increase the civil penalties, from $1,000 up to $25,000. You have a conscientious inspector out there who finds some violations, and he goes ahead and makes a recommendation relative to this violation with a $1,000 civil penalty imposed. It then makes its way up through the—to the regional office, and let us say is finally compromised out at $100.

Now, here is a person who is conscientious, and has found this violation, feels it is a very flagrant violation, and yet it gets compromised away.

Now, following on the heels of the existing rules, comes your proposed legislative piece that says well, $1,000 is not doing the job, we will do it a lot better at $25,000 for each violation.

Now, if you are going to be sitting there compromising out these various violations, and we have the case of Antilles, as an example, where a $100,000 fine, 100 violations, $1,000 each, and then we find that it gets compromised down to $10,000, with $90,000 held in abeyance, unless there are further violations within a 1-year period. For all we know maybe there are no more violations, because the inspector does not show up any more. But we do not know.

But in any event, what about that dilemma that I see developing?

Mr. BOND. There is no question that there have been cases in the past where that kind of thing has happened, and the rug has been pulled out from under our inspectors in the field. It is that very reason, and one of the cases that you mentioned here, the Antilles case, is the reason that I announced our tough enforcement posture in March.

I gathered almost 500 of our key safety field people together in Washington, the day before I made the Washington speech, bringing them all together as Najeeb Halaby did in his day. I said "There is going to be a tough enforcement policy from now on, and I want to tell you people personally that we are going to back you up, and if you do not get backing from us, we are not going to negotiate away sound penalties." We have tried to do better at that.

But I would like to have Clark Onstad explain how our policy works. Clark?

Mr. ONSTAD. Mr. Chairman, the central focus of whether a penalty is compromised or not is in the regional counsel's office. By annual meetings with them, we work together to establish a policy as to whether or not and when to compromise.

We have tried to set the example in Washington. Two recent major civil penalties that we assessed were not compromised at all. What we asked for is what we got. Even though people were used to the old FAA way of doing business.

As long as we think we are sound, we do not compromise. We have set up a procedure whereby on major fines the regions check with Washington to make sure that in the first year or so of this program that there is not a compromise of the penalty unless there are facts shown that indicate that we are wrong.

In other words, to put it in short, when we walk into the room with a civil penalty, we expect to collect that civil penalty, unless we are shown to be wrong. If we are wrong, then we will decrease it by the appropriate amount, or otherwise we anticipate going to court.

Mr. MINETA. Are you, in that instance, both judge and jury?

Mr. ONSTAD. In this sense we present the facts as we expect them to be, to the particular parties. We understand them. We receive them, and if in fact we think that they are sound, they will not compromise, then we have to go to a Federal court, just like anyone, to try the case.

Mr. MINETA. Thank you very much.

Mr. Stangeland?

Mr. STANGELAND. Thank you, Mr. Chairman.

Mr. Bond, I would like to have you turn to the back of your testimony, to the accident rate statistics, and I would just like to have those briefly explained to me.

When we look at the fatals, the accident rate is 3.40, is that 3.40 accidents, or 100 hours flown? I am looking at this chart now at the back of your testimony, Mr. Bond.

Mr. BOND. Yes, this is it. Yes, that is the——

Mr. FOSTER. One hundred thousand hours.

Mr. STANGELAND. 3.40 hours for 100,000 hours. Then the fatal accident rate would be nine-tenths of an accident in fatalities of 100,000 hours?

Mr. FOSTER. Right, sir.

Mr. STANGELAND. And 4.90 people were killed in that accident per 100,000?

Mr. FOSTER. That is correct.

Mr. STANGELAND. Do you have any comparison for the commuter air carriers, the local air carriers, and the fatality rate per mile in an automobile?

Mr. BOND. We have struggled to find meaningful comparisons with other modes of transport, and it is very difficult to do so per hour, per mile, per trip. We can provide those for the record, but I would have to tell you that the debate continues.

I do not know exactly the right answer to that.

Mr. STANGELAND. What I am concerned, or wondering about, is how safe are you in the air, as opposed to on the ground, and I

always felt that perhaps your odds are better in the air than on the ground.

Mr. BOND. Well, it all depends on how you get in the air. The rate for the local service carriers, or the trunks, is superlative. For general aviation, at the lower lower end of the spectrum, there is a greater degree of assumed risk.

The commuters are somewhere in the middle, and are going to be moving rapidly toward the up side.

Mr. STANGELAND. When we talk about local service, I would like to get that cleared, too, because I was thinking of local service, something other than Piedmont and Ozark.

Mr. BOND. We mean the regionals; that is what we mean by regional service.

Mr. STANGELAND. Like Republic?

Mr. BOND. Yes, sir.

Mr. STANGELAND. Would Republic be local service?

Mr. BOND. No, they would be a trunk carrier.

Mr. STANGELAND. On page 2 you stated that there were 180 commuter crashes. How would that compare, or would you have any comparison, to the number of private airplane crashes, like the one at Lake Pontchartrain. I am trying to think of another one, this one out in Minnesota a couple of years ago, where the executives of the corn company were killed?

Mr. BOND. Remember that an accident is not quite the same thing as a crash. A wheel may be knocked off, or something. It includes a lot more than just catastrophic accidents. It includes all accidents.

I guess there are about 4,000 general aviation accidents per year.

Mr. STANGELAND. So when you compare the commuters, they are substantially safer than private aircraft?

Mr. BOND. Very much so, and I might add there are 4,000 general aviation accidents per year, and maybe 1,500 fatalities. So maybe there are about 800 fatal accidents, something like that, with only one-fifth of the accidents actual fatal accidents.

Mr. STANGELAND. OK.

In your statement you consistently refer to commuter airlines as unsafe, and having a poor safety record. Are you saying that all of the more then—what is it, 280 companies are unsafe?

Mr. BOND. No, I did not say that. I did not mean to imply that the commuters were unsafe.

In fact, by standards of driving down the street, or walking out on the golf course, when a thunderstorm is around, or whatever, they are pretty safe. But what I have said is that they are not safe enough. I tried to walk a balance between the New Testament and Old Testament approach to this problem. I definitely hope for redemption.

Mr. STANGELAND. On page 7, I think you made the statement that you have not hesitated to assess penalties, and even going so far as to revoke certificates.

How many certificates have you revoked as a result of your inspections?

Mr. BOND. When I use the word certificate, I mean the whole airline put on the ground. We have a whole lot of grounding, one plane, or one pilot. But I believe the number of airlines that have

been grounded is now over 10, and we just did one this morning. So we have another coonskin on the wall, as President Johnson said.

Mr. STANGELAND. In your statement, where you recite the number of actions under your surveillance program, from July 1 to December 31, 1979, were you able to do those with the number of inspectors you had, or did you have to hire more inspectors, and when you do these inspections, do the airlines bear any of the cost of the inspecting that you do?

Mr. BOND. No, they do not bear any of the cost, except indirectly through fuel charges, and so on. Not even the tax that is collected goes for our operating costs yet.

As to the work force, all of this has been done with our existing flight standards field work force. It has been an emphasis program, and we have pulled those folks away from their ordinary duties in general aviation, for the most part. They have done less safety work on general aviation, and they have done an awful lot on commuters.

I think this is the right way to approach this commuter program. We have a whole new generation coming out, a whole new rule, the workload will be much less in the years ahead. We can return to the normal balance in 2 or 3 years, or 1 year from now.

I might add that the year just completed, calendar year 1979, has been a very busy year for us with the commuters. Up to the first of July, and through the first of December, we have worked to get the carriers certificated. That means review of all their paperwork, and so on. We are now into the regulatory enforcement or penalty phase, and we have had to leave general aviation relatively alone.

Incidentally, we are now working on new technical design standards for a generation of aircraft specifically created for commuter use. It is not promulgated yet, but we have been working very hard with the operators, and with the manufacturers, and foreign countries on the new part 24, and it is that to which I refer.

In addition, the normal market processes are bringing in, even under existing standards, aircraft like the deHavilland-7, and more and more of the turboprop Swearingens. In fact, what is happening in the equipment side for commuters is one of the most encouraging stories to us that I can think of. We are seeing announcements of new aircraft every 2 or 3 months.

The one that I alluded to in my testimony, the Fairchild airplane, in cooperation with Saab-Scandinavia of Sweden, is going to be a full part 25 airplane, built to the highest technical standards. It will be a turboprop, fuel efficient, have a high cruising speed, and be like a miniature airliner, only for 30 seats, and that will provide splendid service to the small communities, and the demand is there. Beechcraft is designing them. Air Italia in Italy. Aerospatiale in France. deHavilland in Canada. All of them powered by American engines from Pratt & Whitney, and possibly Garrett.

Mr. STANGELAND. Can you give us an indication of the safety record of our commuter airlines, as opposed to those foreign countries that are manufacturing those planes, and flying them?

Mr. BOND. I cannot, and I doubt that we have it. The commuter industry is almost unique to the United States, at the moment. Our distances and pattern is such that most of those trips in a foreign country are taken by train, in the highly industrialized countries.

Mr. STANGELAND. So they do not have the commuter traffic, but they build the kind of planes that we need?

Mr. BOND. They are planning to build them, yes.

Mr. STANGELAND. I see.

Mr. BOND. I wish we had more American manufacturers jumping into this, as airframe builders. The Fairchild decision to go jointly with Saab in Sweden is a typical decision. It costs a lot, front end costs, to get an airplane underway, and an internalization of the process is what we are seeing a lot of. But the logical place to build these airplanes in the United States would be the general aviation manufacturers, Piper, Beech, and Cessna. Although Beech has made some plans, for the most part these people, in my opinion, are making more money for general aviation turboprops than presently with commuters, so they are not moving into the field so quickly.

Mr. STANGELAND. In appearing before the National Transportation Board hearing, some of your representatives indicated they could detect a bad apple operator within a few minutes. Yet some of your people here stated that they could not spot this claim. Who is correct? Is it easy to spot a bad apple, or does it take a good deal of inspection and investigation and surveillance?

Mr. BOND. I would have to ask the people who made the comment what they meant. My view, however, is that people do know who the bad operators are. Just hangar talk provides it, and our people, if they are tough enough, and they get the evidence together, can find them.

Mr. STANGELAND. How can the general public know?

Mr. BOND. I do not know of any good way for the consumers to ferret this information out.

Mr. STANGELAND. If you find a bad apple, do you have a program of assistance, or do you just say you are a bad apple, clean up your act or we are going to pull your certificate?

Mr. BOND. Well, it is a combination of the carrot and the stick. We try to help them meet the 135 standards, but if we think there is an immediate threat to the safety situation, we will pull the ticket right there, and let them reform themselves, while they are on the ground.

Mr. STANGELAND. Do you have any program of assistance for them?

Mr. BOND. We have a limited program of assistance.

Mr. STANGELAND. Of training, or education?

Mr. BOND. Our people will come in and explain to the operators, and have done so massively over the course of 1979, but for the most part, Mr. Stangeland, the responsibility for training their people, as opposed to getting their program right, is on the operators themselves. The question is really management. To us there is clearly a shortage of middle management in the commuter industry. There I know it is going to be cured.

There is a lot of talk about good people available, but middle managers are short. I have had some discussions with the aviation schools, for example, down in Florida, lots of them in California, who are beginning to tailor courses and educational training programs to this particular market, and I think that is where people

are going to get more in terms of training, and upgrading, than they will from us, as they do from flight instruction, and so on.

Mr. STANGELAND. Thank you.

I will reserve the right to question later, and allow some of the others to question.

Mr. MINETA. Yes, we will have subsequent rounds, Mr. Stangeland.

Mr. Royer?

Mr. ROYER. Thank you, Mr. Chairman.

I guess I should say, Mr. Chairman, that Mr. Bond cannot be put in the category that he was, because when he started out his questioning, he said they came in with 18 different binders of regulations. I think the fact is there were 19. So he could have gone 20 or 21.

I think the right number is 19, and it is one of the areas that I would like to talk to you a little bit about. Do you think it is more than that?

Mr. BOND. No, Chuck's comment was 21, of the trunk airline carrier came in with his rules. Those are even more voluminous than we reqire for the commuters.

Mr. ROYER. He was just talking about the commuters. I want to follow up on the question by the gentleman from Minnesota, that talked about involving the industry and the regulations. Because their testimony indicated fairly clearly to us that they felt we had enough regulations that were just consistently poor.

So I want to just check a little further with you as to what degree their input is going to be taken into consideration.

Mr. BOND. One of the surprises when I first became Administrator of the FAA was to find that this rule was needed, and pending, and that it had been studied by the FAA for no fewer than 6 years.

So I asked when we were going to put out a draft rule. They said well, it is going to be at least 18 months to 2 years before we can put it on the street. That was in May or June of 1977, when I first came to town.

Violating tradition, I put my foot down and demanded that it be issued immediately, even if it was not perfect at the time it went out, in August of 1977. Then we adopted it finally about 15, or 13 months later, and of course, now it is in full implementation.

Throughout that process there have been meetings, all the full guarantees of the regulatory process, comments have been analyzed, costs estimated, and published, so that the impact of the rule has been fully consulted with the operators affected by it. They do not all agree, but nonetheless, they were consulted.

In the implementation of the rule process, we have an active program of talking to the folks who are affected by it. Not only that, we had a big commuter conference here in January. We are replicating that conference in the regions, talking to the folks at the regional level.

What is wrong with the rule? Is it practical? Does it cost too much? Do we need more? All of this is going on. That is our program.

Mr. ROYER. I think that is certainly a step in the right direction, and I think your testimony indicated earlier that you are trying to be more consistent now in the application of the rules.

Mr. BOND. Yes, we are.

Mr. ROYER. I would like to point out the one question that it seems to me that while we are developing some new regulations, that maybe at the same time we might eliminate some of those, and get those numbers of binders down to a point where they are more workable.

Mr. BOND. I would like to know what was in that pile of 19 volumes. You know, if a carrier operates two or three different kinds of aircraft, they will have a whole manual for each. If the fleet is a single kind, then they will have one book.

Mr. ROYER. I think that is the point I am trying to make. In the areas where commuters are using different aircraft, it still seems to me that the numbers of different binders that seem to be required, and he had 19 there, I cannot tell you what was in them, but they were there, and I think maybe it would be well for you to review that testimony, and see just what they were talking about.

Can you give me an indication—if there is a definite definition of the size of aircraft, and what numbers that the aircraft can carry in the commuter line? Is it 20, 30, 40?

Mr. BOND. You can design an airplane to carry any sort, of course. But the definitions have been hard to pin down. The CAB has had one definition, and from our point of view, we have had another. We have had a definition for operating rules, and then a different definition for the design rules of the aircraft. The industry is dynamic.

Mr. ROYER. So there is no real number definition as far as how many people can be carried in a commuter airplane?

Mr. BOND. Our 135 rule, that is our operating rule, for example, is that anything under 30 passengers falls under the commuter rule. If it is bigger than that, then that is the part operating under 121, which is a more complex and tougher rule for the large air carriers.

Mr. ROYER. OK, what kind of an impact do you see with the more emphasis going to the commuter airlines than on general aviation?

Mr. BOND. Well, I would have told you that lacking close attention from the FAA, why things would get worse. But experience does not bear that out in 1979. That will lead to another policy study, maybe.

Mr. ROYER. If I understand correct now, with the increase in the number of commuters, you are transferring the responsibility to a new section. Was that not in your statement?

Mr. BOND. That was in our headquarters rulemaking. We put the rulemaking capabilities and interpretation into an air carrier section in headquarters. In the field we are assigning our people more to aviation, and less to administration. They will shift back later on.

Mr. ROYER. There is no problem in your mind, using the same type of people in both of those areas?

Mr. BOND. No, the training is for both.

Mr. ROYER. It is similar. The one question that appeared to me, in the very first part of your testimony, was in reference to the percentages of accidents, the 57 percent pilot error, 21 and a half percent maintenance, and so on.

Do you have any comparisons, comparing to the commercial airlines, of what their pilot error responsibility is?

Mr. BOND. It can often be traced, to pilot error, or to some human error. I think the numbers for trunk carrier accidents, for example, would be similar. I do not know exactly what the numbers are, however.

Mr. ROYER. I think it would be a good question, or a good answer, because if I remember correctly, in the testimony that we had from the commuter companies themselves, the indication was that the age of their pilots was considerably higher than the others, I know we had this big argument back and forth, on the sixties rule, and I was wondering if there was any difference one way or the other.

Mr. FOSTER. We found, in the air carriers, in the large trunk carrier accidents, that the same thing is there, as far as the human error, the pilot error, it runs up as much as 82 percent of both pilot error, and contributing pilot error to accidents.

I do not think this rate has changed, back beginning in World War II, as far as accidents are concerned. What takes place in the system, particularly in the cockpit, the contributing factor to accidents has always been high in human error element. That is part of what we were commenting about, the attitudes, although the people have the training, they have simulators, and experience, and thousands of hours, and so forth, we still have people who fly around and run out of fuel. We have three people in the cockpit land in the water with everybody looking at the altimeter. Those are the kinds of accidents that continue to occur, and they all occur across the board, from general aviation out all the way to the top operators.

Mr. ROYER. That more or less sounds like the age situation does not enter into it. If you are saying the percentage is pretty close to the same in both types of carriers?

Mr. BOND. Well, I do not think that is what we said, addressing age distributions one way or the other.

Mr. ROYER. I know the only thing I am saying to you, is that the testimony that we received from almost all of the commuter airlines was that their pilots were considerably older on the average than what takes place in the commercial airlines.

Mr. BOND. I do not know what their age profile would be, but I would suspect they have a lot of young ones, and a fair number of older ones, too.

One of their problems is that they hire young pilots into the commuter business. Many are from the charter operator and flight instructors, etc. They fly a while for commuters, and then they move into the larger air carrier fleets. So they have a pretty high amount of turnover in that business, and it is an operating problem for them.

Mr. ROYER. I would like to suggest, Mr. Bond, that maybe you would do a little research on that, because that was not the testimony that we received.

I guess the one last question that I would like to mention to you, and I wonder if we would not be better off to be a little more up front about the amount of penalty that we want to levy.

In your testimony, you indicated that it had been $1,000, and actually have only been levying fines of $100 to $200, and now you

are asking for a maximum of $25,000, which sounds to me like it is there more as a club, and probably would not be used.

I am just wondering if we might be better off to be a little bit more straight forward, and say look, if you fall under certain categories we are going to whack you, and it is going to be $500, or $10,000, but not through something that even you admit in your testimony, that probably would not be used.

Mr. BOND. I did not mean to admit that. I take it back. What I tried to say was that we do not always assess a full $1,000 fine, and where the violation is small, or unintentional, we apply plenty of $100 and $200 fines. So we use the full range of it, and we really do feel the higher level of penalty is an important one.

Here is one of the things that is disturbing to us. At the level of $1,000 per occurrence, it obviously is better off for many carriers financially to complete the flight because the cost of getting caught is far less than the cost of stopping.

Mr. ROYER. I am not disagreeing with you on raising it. I think you are right, and I do not think that our fines should be such to encourage people to go ahead and not comply with the law because the fine is less important.

All I am saying is that the jump from 1 to 25 may be excessive, and may be something that you would not, from a practical standpoint, use, and I think it is something that you ought to reconsider.

One last question now, and then I will be through, Mr. Chairman.

I am not sure that maybe your new regulations take care of it, but the 12 hour rule of flying, and the fact that these commuter airlines are going to many different airports, as I understand it, could during that period of time, make many different landings, maybe 8, 9, 10, I do not know whether that is a realistic number or not, and that many of those airports have nonprecision approaches.

That is asking quite a bit, I am not sure that after about 8 or 9 hours of flying, that they can be sufficiently alert on the eighth or ninth approach, is this flying time realistic.

Mr BOND. It is a very good point, and I will tell you where we are on that problem.

We have decided to address hours of service and fatigue issues for both the major trunk carriers and commuters in the same rule. It seems to me that the principles ought to be the same across the board. We have had a dickens of a time sorting out all of the required cost impacts and safety impacts of the rule for whatever sort of a carrier might be involved. It is tied up in labor agreements, for example.

The larger air carrier pilots do not have very heavy work schedules. Eastern Airlines, I believe, now is really flying less than 50 hours a month, 47 hours a month. In fact, successive contracts are bringing the crews down to the British. I think that is something that is disturbing to me.

Other carriers work very high levels. But when we put out a rule on this subject, and we have been working on one since I got here, we have got to figure out what it costs, whether it is a Federal rule, or labor, or a negotiation matter, and what its safety impact is. That is a tough thing to pin down.

We have not done it yet.

Mr. ROYER. In other words, you are indicating, I think, that it may not be as serious a problem as maybe what it appears to me to be?

Mr. BOND. We think it is a serious enough problem to impose a rule on, and that is why we had one draft rule out, but that one was inadequate in terms of its justification. We did not think it would stand up in court. We tried to create other data on it, but that also had its flaws.

If the case were clear cut, I must say we would not have any trouble generating this data. So it is arguable.

Mr. ROYER. All right, just a final statement then.

I think you are moving in the right direction, and so you could take this little bit of criticism with that in mind. I am just wondering about the ruling that put a firm out of business because of their financial situation versus their record, at least this is what we read in one of the magazines.

Mr. ONSTAD. I think I can explain that one.

We got in a situation where the Civil Aeronautics Board had the firm in question on a very short string, and because of the interagency agreement between the two agencies, we were exchanging information, and it got to the point where we had to station people virtually every day in their maintenance shop. We had to check ride every flight, and it got to a point where we had to say, do we devote so many Federal resources to keeping this carrier afloat, or in an era of deregulation, if they go under, they go under, and the judgment of the FAA and CAB was that it was taking so much time to make sure they were safe, because their financial condition was so shaky, that we simply could no longer devote so many resources.

Mr. ROYER. Does the report clearly indicate that? Because the information that is out of the magazine more or less made it look as if they were decertified because of their fiscal capabilities and not all these other things.

Mr. BOND. There was a letter sent by our northwest regional director, Mr. Chris Walk, to the Civil Aeronautics Board, and it was on the basis of that information that the Civil Aeronautics Board acted to terminate their certificate.

Mr. ROYER. Thank you, Mr. Chairman. I yield back the balance of my time.

Mr. MINETA. Mr. Clinger?

Mr. CLINGER. Thank you, Mr. Chairman.

Mr. Bond, where there is conflict in interpretation of FAA regulations from one region to the other, or even within the region, you have indicated that you do your best to resolve those conflicts at the Washington level. Is this done on any sort of formalized basis, or is it just kind of an ad hoc thing, that, as people realize that they have a conflict, they call in and ask for interpretation?

Mr. FOSTER. It is done both ways. We have meetings with all of our inspectors and regional chiefs twice a year, at which time any issues like this are discussed, any problems that they have, matters of interpretation are covered at that time. If there is a question, they call Washington, and it is resolved immediately.

The program we have underway now, dealing particularly with commuters, as Mr. Bond mentioned, the conferences we will have

in all the regions, we will have headquarters people attend each of these regional meetings, to make sure that there is an understanding of all parties there, of what the headquarters interpretation will be, as a result of any issues that might be brought up, and we anticipate now that part 135 is in full effect, and all operators are complying with it, as of last December the first, that there will be a lot of questions raised, and one of the functions of these regional meetings that we are going to have over the next 6 months is to make sure that we will have headquarters people there to get both the input of questions raised and make decisions, and those will be disseminated as people go from meeting to meeting.

Mr. ONSTAD. If I could augment Mr. Foster's response, Mr. Clinger.

We in the legal shop are organized into branches in the enforcement section. So that there are effectively three people that handle 135 interpretations that come from the field. So it is closely coordinated.

Whenever we give a written interpretation, that is circulated through the counsels, and goes to the field. Again, like the Flight Aviation side of the House, the lawyers get together twice a year, and they discuss these kinds of problems plus if a need comes up we have a team go to all the regions to make sure that they have a clear understanding.

So, to the best extent that I think we know how, we are trying to make sure that these interpretations are uniform.

Mr. CLINGER. We have had some indications, that sometimes these different interpretations arise in the regions, and one region is not aware of what the other one is doing.

I wonder if there is any way that you could catch that sort of thing in the interim between meetings as it were; because apparently sometimes different regions are interpreting the regulations differently, and do not know that they are in conflict.

Mr. FOSTER. We are well aware of this problem, and it is a problem. That is why we are taking the steps that we are to try to rectify it.

If there is any question when a regulation is published, instructions are sent along with that regulation to indicate exactly what we mean if there is any possibility that there might be misinterpretation in the field.

I think the program we have now, with the meetings, and as Clark said, if there is any question, on a regulation or interpretation that we felt to be misunderstood by other parties, we would have a telecon with all of the regional representatives to make sure that everybody across the board understood what the issue was, what the question was, and what the answer was.

Mr. CLINGER. I am advised that there is at least less divergence in one instance between commuters and air taxis, where one region I understand allows average passenger weights and baggage weight, and the other does not in the computation of weight and balances.

Mr. FOSTER. I am not aware of that.

Mr. CLINGER. Are average weights allowed for passenger?

Mr. FOSTER. For certain type aircraft. It depends on the size of the aircraft. If it is a 10 or more passenger aircraft, they can

average. But less than that they must have the actual weights. There is a difference of using actual weights and average weights. It depends on the operator, on the type of equipment he is operating.

Mr. CLINGER. My understanding is that they are not allowing this in Alaska at the present time. That is one reason why I got into this chain of questions.

Mr. FOSTER. We will check into that. That is the first time I heard of it.

Mr. BOND. I think I do have the circumstance, though. We find some places, like the Caribbean, or Alaska, where people will carry more on board with them, for obvious reasons, than they would just ordinarily on a business trip, and we will not hesitate to differentiate from the ordinary rule if we find something like that occurs.

Mr. CLINGER. Just following up on that, do you feel there is any need to custom tailor such regulations, such as in Alaska?

Mr. BOND. We do that in the interest of time. The more familiar I have become with the business, the more it strikes me how different the operations are from place to place. Our region in Hawaii, for example, for flying in the Islands, we do not even require radar on the planes out there. There are no thunderstorms to worry about. We issued a waiver for that. In the Rocky Mountain region, mountain flying is a unique and different discipline. New England has a lot of operations along the coast, so the requirements are different. We look at different things.

Mr. CLINGER. There's been a lot of testimony—and perhaps this was alluded to earlier, but there appears to be some conflict in testimony from FAA personnel regarding this in the NTSB hearings—there was testimony yesterday whether they could identify "bad apples" as a result of experience in dealing with them. Some could not claim this experience. I'm wondering who might be right in this instance. Does it depend upon the experience of the inspector, or something else?

Mr. FOSTER. I think there's two things. I think, first of all, it depends upon the experience. I also think it depends upon the "bad apple." If the apple has a worm in the middle of it and you can't see it from the outside, you may not know it's a bad apple. If it's rotten, you can see it as you look at it, and you know you've got a bad apple.

The same thing could be applied to a carrier. Take, for example a process of falsifying the records, or something of that nature. It may be difficult in some of these cases to start looking; whereas if it's very obvious, a flagrant violation of the management of the company itself, it could show up very quickly. So I think it depends upon the experience as well as the bad apple we're talking about. I think both play a part.

Mr. CLINGER. If there is such a thing as expertise in identifying bad apples, I'm wondering, Mr. Bond, you include in your testimony the great number of inspections, and so forth, that had gone within the last year.

Is this done on an industrywide basis, or do you intend to focus on those where red flags have been raised in the past, and give them more coverage, in effect? It would seem to me if you have

limited personnel, experience from past actions should command the most attention.

Mr. BOND. Well, we do both. Our surveillance rule provides a very high level of checking for everybody.

I encourage my folks to do just what you suggest, which is to concentrate their effort where they think a problem is. We're using more and more what we call SWAP teams, which is a sudden and unexpected inspection by our people where we think there's a problem. We really come down on them hard if we think there's something out of the ordinary there. So, we really do more random, selective work, than we have in the past. And as I said earlier today, we just pulled the operating certificate this morning for an operator in Arizona; and as a result of that kind of just sudden inspection.

Mr. CLINGER. We have had testimony from the NTSB the other day that in some instances operators with deficient safety records have been allowed to continue to operate with the knowledge of the FAA until they had an accident; and I'm wondering how this could happen. For example, the Antille——

Mr. BOND. Well, it's a very good question. That sort of evidence is the reason for the tough enforcement policy that we adopted formally last March. I really do think that our people have a pretty good sense of who is good and who is not out there, and somehow over the years the notion that the inspectors could not get away with tough, determined, enforcement policies, spread throughout our agency.

I will tell you that I think the Administrator, himself, is responsible for that, and I have found that the attitude that I have on any number of subjects spreads quickly through my regional directors, through my regulatory staff in Washington, through the people in the field.

If they think that somebody is going to call Washington and have some political person rumble about his safety inspection or a fine, and then have it cut off, people take that to heart, and they think they can't get away with it. They can't be tough.

So, I think the fault of it, in the end, lies right here; and the cure for it, equally, I hope lies with me as well. General Quesada, who, under Eisenhower, was the first administrator of the FAA had a tough, determined, enforcement policy. It has not been so emphasized by the Administrator of the FAA until today.

Mr. CLINGER. I certainly welcome that very refreshing attitude, Mr. Bond. It think it will go a long way toward getting out of some of these problems. I want to follow up on that a little bit.

One of the things that occurs to me that might account for the higher accident rate, perhaps, among the commuters, is the type of airports that they are flying in and out of, given the fact that there are some admitted deficiencies within the airports that commuters use. Isn't this the responsibility really of the FAA, not of the operators?

Mr. BOND. Well, it certainly isn't the operator, and from the point of view of navigation aids, it's our responsibility, for sure.

We would like to improve the level of navaids that are provided for the commuter airports throughout the country. We are convinced that what we provide now, which is rather primitive in

some areas, is combined with operating practices that are very conservative so that there can be a safe level out there. But we would like to provide even better than that but we are financially constrained, no question about it, from doing just that. And the more money Congress gives us, the better quality of service we will provide to commuter airports. We always have to decide whether another ILS at an airport is worth taking that money away from our computer replacement program, for example; and this committee has been concerned about that.

We always have competing demands.

Mr. CLINGER. Thank you, Mr. Chairman. Thank you, Mr. Bond.

Mr. BOND. Mr. Clinger, may I just make one more observation on the question of enforcement and leverage.

I tried to understand how the notion got out over the years that the inspectors in our work force would not get away with a tough, determined policy.

My own experience as Administrator is that there are very few bothersome political pressures to me not to be tough on safety.

In fact, the opposite is true. I haven't found heavy political forces coming on me. People occasionally worry about due process for a constituent; but nobody has leaned on me very hard. I finally think that it's an accumulation of inattention to the problem rather than at the Administrator level. Rather than some kind of irresistible pressure from some other part of society, there's a lot of interest in aviation safety 'and it's just that over the years it's built up piece by piece that the people ought not to be mean.

Somehow the attitude came over the years that we should be more coach and not cop; and I think we should be both.

Mr. CLINGER. Well, I would certainly accept that. I think the operators who testified before us the other day indicated their belief that good safety is good business, and they're certainly extremely concerned about this.

Mr. BOND. It is.

Mr. CLINGER. And I don't think that, at least those operators were in any way trying to cut corners to create a more economically profitable venture. The complaint expressed by them was that perhaps they would tend to favor the coaching more than the enforcement; again with the idea that they are pretty responsible, they are doing good jobs, and their problems are one of interpretation of what you want, quite often.

Mr. BOND. Quite right.

Mr. Clinger, I want to make a prediction. I don't always do this since people remember predictions. We are going to see a dramatic turn around in the record of the commuter business. We have the rules. The equipment is coming along. The training is going in there. Our surveillance is going to come, and most of all, we have a tradition which is what is operating now with the larger air carriers, that we can bring in essentially in a body to the commuters.

This industry is already on the uptake, and it is going to provide the kind of safety record that this committee and the public wants. We will win this and shortly.

Mr. CLINGER. Thank you very much, Mr. Bond. Thank you, Mr. Chairman.

Mr. MINETA. Thank you, Mr. Clinger.

We're very pleased to have Mr. Roberts with us, this morning. Mr. Roberts?

Mr. ROBERTS. Thank you, Mr. Chairman. I apologize for coming in late, to you and to Mr. Bond. I have no questions. I only want to compliment Mr. Bond on what he has been doing over there, and say that I certainly wouldn't be competition for his job, because if you do what you're probably going to have to do for the commuter airlines, you're going to be charged that you're trying to run them out of business. So, I certainly don't envy you your job and I hope we can give you the kind of support that you need. I'm happy you said that nobody has been leaning on you politically because we're interested in fairness but we're interested in safety first.

Thank you very much, Mr. Chairman.

Mr. MINETA. Thank you very much, Mr. Roberts.

In 1972 an air taxi special study was, I believe, done by NTSB; and it was noted that FAA surveillance and enforcement varied and in most cases was minimal due to two factors: One, insufficient number of assigned inspectors; and second, varied interpretations of the applicable rules.

The study recommended that FAA assign a principal inspector to commuter airlines with primary duties of surveillance, and that the FAA standardize air taxi surveillance procedures. This recommendation was repeated in similar recommendations following commuter accidents in January of 1974, December of 1976, September of 1977, and February of 1978; and I'm wondering what the FAA has done in response to those recommendations from the Safety Board.

Mr. FOSTER. Mr. Chairman, first of all, we have assigned inspectors to the commuters. As was mentioned earlier, we are adding more inspectors to the field. In 1979, we had 1,642 inspectors.

Mr. MINETA. Mr. Foster, are those principal operations inspectors separated from duties relative to general aviation? Because, as we see it, a principal operations inspector has been one who is doing general aviation as well as air taxi and commuters, and I think the question here is, has there been a division of that responsibility?

Mr. FOSTER. We have inspectors that are principal operating and principal maintenance and avionics inspectors assigned with specific commuters.

Mr. MINETA. When was that changed?

Mr. FOSTER. It's been changed over the last year, or year and a half. But as far as the total number of inspectors, I just want to mention the fact that in fiscal 1980, the 1,642 will go to 1,741, and our budget for 1981 will bring that up to over 1,800 inspectors. This will be a larger inspector force that we've had in the field in the last 10 years.

This will then provide us, we think, the capability to perform inspections in the manner that's going to continue to give us the kind of safety that we're looking for. As far as the other recommendation, in consistency, we have published a new handbook for our inspectors. We have published specific orders identifying the types of things for our inspectors to do. For example, in our enhanced surveillance order that we put out last April, we identified specific things that should be done by inspectors in the field with all the commuters.

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So, I think as far as standardizing our inspection procedures, and activities, with the school that our inspectors are going to, the handbook we put out, the specific surveillance that we've put out for this minimum of 1 year for each commuter after the certification, all are bringing together a common thread and a common, consistent position of policy on commuter inspection.

Mr. MINETA. In looking at that notice 8000.176 on increased surveillance, yesterday we had four very fine FAA people from the various FAA regions; but you take someone, let's say—and not to use Mr. Gossen who we had yesterday from Alaska as an example—but just using, not Mr. Gossen, but Alaska as an example, where he had at one time, let's say, 52 certificates. He's in Anchorage and one of the certificates is over at Bethel, 560 miles away; and he's looking at notice 8,000.176—now, he didn't say this yesterday—he's looking at 8,000.176 where he has to do ramp inspections and all these various things; and he's got one-third of his time that he's using just in traveling. And then you have someone over, let's say, in Houston, or someone in the New England office who has got a much different character of environment as far as his work setting, and I'm just wondering how that inspection force is spread out to reflect those kinds of various regimes that those offices have to work under?

Mr. FOSTER. Well, you certainly have put your finger on a problem we have. We are studying this problem. We have studied it. It is a method by which we will allocate the new inspectors as they come into the agency. We have a program in which we look at the specific points that you made; the number of operators, the traveling, whether they can do it by car, or they have to go by FAA airplane, or whether they have scheduled service, to assist us in determining what the work load is. As you've mentioned and you're aware, we have inspectors who have several operators under their surveillance. In some cases they may be just operators with 1 or 2 airplanes. In some cases another inspector may have only one or two operators, but they may have 8 or 10 aircraft. So, all these factors are utilized in our consideration in the assignment of personnel.

Mr. MINETA. And is there a schedule you're working on right now to review all that and then have some new operating schedule within a certain time line?

Mr. FOSTER. We have a continuing program going on right now.

Mr. MINETA. I also understand it takes 2 years for a person to become a journeyman inspector.

Mr. FOSTER. Well, the time it takes a journeyman to become an inspector depends upon the experience and background he brings into the agency as well as the training he gets.

Mr. MINETA. Well, now, are not all trainee inspectors under a 2-year program before they get to become a journeyman?

Mr. FOSTER. I was just informed that the issue that was raised on this had to do with a trainee, a person who comes in, you might say, fresh or green. But it only takes 6 to 8 months if a person has adequate background experience once he goes through the program to be a journeyman inspector.

Mr. BOND. Mr. Chairman, I'd like to add to something that you just brought up.

Our people are at their best when they're moving around, and when they're out where the airplanes are and where the operators are. The Congress, last year cut an executive branch total of $500 million in travel funds out of which we have had to absorb our share. How this reduction in our travel money will affect us is hard to tell, but it's not very encouraging. We might as well not hire new inspectors if they can't be permitted to be sent out somewhere. Our travel budget in the FAA is more or less $70 million per year, and the bulk of it is in sending our controllers to Oklahoma City training, our maintenance people to get upgraded. They have to travel around. Our flight inspection types go somewhere, stay overnight and inspect an operator. Less than $5 million of that 70 is what can be classified as administrative travel in the FAA. It's all sending somebody somewhere or other for training and safety, and the reduction in travel funds that we're facing is a very alarming circumstance for us. We're having to cancel controller training classes; we're having to not hire new controllers, we're having to defer training of our personnel skilled in maintenance of the computers and radars, and so on, because we can't afford to send them there.

As a matter of fact, already we have a middle-management training course at Lawton, Okla., and we've cancelled the whole thing because we didn't have the travel money to do it. Next, we're going to have to start taking bites out of safety travel.

Mr. MINETA. All right, just dealing, though, with flight standards divisions, you're saying the travel of the flight standards division is going to be impacted by this?

Mr. BOND. Well, sooner or later it will be, yes.

Mr. MINETA. And yet Mr. Foster said you're going up to a work force of over 1,800 inspectors alone?

Mr. BOND. We have asked for more travel money. Yes, the assumptions that you have had explained to you assume availability of adequate amounts of funds. What we're trying to deal with is a reversal.

Mr. ROBERTS. Mr. Chairman, would you yield?

Mr. MINETA. Of course, I would be more than pleased to yield.

Mr. ROBERTS. I'm glad you brought up the matter of our taxes, because I've done more than a reasonable amount of flying in Alaska; and I want to say that probably the most efficient Federal employee I ever saw was the FAA man at a little place I believe called King Salmon out off from no place. The question I want to ask is, I'm confused or you're confusing me, between travel and you're own airplanes. If you're in Alaska, you're not going to do any traveling. Wien hits a few places, and you're going to have to have your own airplane. Now, is that part of your travel, too?

Mr. BOND. In part yes; in part, not.

Mr. ROBERTS. If you want to go to King Salmon or to Bethel or one of those other remote areas, unless you can get one of the boys to give you a helicopter ride, you're in deep trouble.

Mr. BOND. Well, you've pointed out two things. If it's on our own airplane, it comes out of another budget. It's our airplane operating budget. But they have to stay overnight and rent a room, and eat on their way out, and that's a per diem problem, and that is travel.

Mr. ROBERTS. That's what I wanted to clear up.

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Thank you, Mr. Chairman.

Mr. BOND. One of the things that I tried to work on, incidentally, Mr. Roberts, is airplanes. We used to have 140 airplanes in the FAA. We're down to 75 now. We've acquired a few more which will be used by our flight standards people in the regions; but basically, we don't have enough planes to keep our people flying all the time. Just the act of flying for our people is good for their morale, shows the flag, deters the miscreants when it's parked out on the ramp; and we're trying to bring in a modest increase in our field flying ability out there. I have heard enough jokes about the inspector who drives up in a station wagon and we've got to do more of that, too.

Mr. ROBERTS. Isn't King Salmon where you've got a little facility off sort of by itself, a little enclave of people that live there?

Mr. BOND. I believe that's right. We have our own housing at a lot of places in Alaska for the same reason.

Mr. MINETA. You cite statistics of your surveillance activities in the second half of 1979.

How do those compare with earlier periods?

Mr. BOND. Well, I'm sure it's much higher because in the second half of 1979, we switched from our efforts to get people certificated over to surveillance of them. So the numbers are unquestionably up probably 50 to 60 percent higher.

Mr. MINETA. And were you able to do that in the second half of 1979 with this increased amount of activity by your inspectors in the commuter area without increasing your total inspection force?

Mr. BOND. Yes.

Mr. MINETA. Now, does that mean that other areas other than commuters, then, are receiving less attention from the inspectors?

Mr. BOND. Yes, sir. Less general aviation.

Mr. MINETA. You've also been criticized for insisting that you could take on the new workloads of commuter aviation under the Deregulation Act without additional inspectors.

Now, there is a request, you say, for fiscal year 1981 for additional inspectors?

Mr. BOND. Yes.

Mr. MINETA. What is that total force that you will be asking for?

Mr. BOND. The total improvement in the force will be around 190, counting some that were in this year, and then another 150 or so that are in the upcoming year's budget. I'm sure we will receive those inspectors. But we're not limited to hiring more people. As you may have gathered from my testimony here today, I am suspicious of the answer that always seems to come up in the Federal Government, which is "we need more people to do the job." I hear it too much, and I've just got to the point where I don't believe it all the time. It seems to me that people don't use the alternative solution which is to abandon the stuff that doesn't matter, and concentrate on better management of the existing work force, or remedies rather than increased surveillance, which has increased penalties. We've done that.

In any quality control system—and safety surveillance is in essence a quality control system—you can go about it in a number of ways. One is to inspect every single article, 100-percent inspection. Or, you can have a random inspection process, and be tough when

ou find a defect. That will persuade people not to have defects so hat they won't be caught on random inspections.

I believe that the random sampling combined with tough penalies, which we have not had, is a very sound way to increase the evel of safety out there. It will work.

We also have a separate program. We haven't touched on it in his hearing, and we're about to announce it, which is aimed at trying to increase the amount of work that our people do, real work, surveillance. We find that an awful lot of our inspector's time is essentially wasted in filling out forms. Somehow the paperwork of the safety process at the FAA is awful. They have antiquated forms. It's all done by hand. It's mailed off someplace. Weeks later the answer comes back to find out what the engineering standard was, or how many violations this particular operator has. We are not supporting our field work force well at all; and in a day and age where people can have a computer terminal with instant recall of data, it is stupid for us not to improve that situation.

We are in the middle of a complete upgrading of the administrative and data support of our people so that they won't have to fill out forms and wait. We're going to back them up better. Chuck might elaborate on this a bit, but we have test systems with this computer system and the cathode ray tube recall in Louisville, Ky.; in St. Petersburg; and one up in New England. I am told that the work force, our folks in those GADO's, have become totally dependent on this. They like it. They're getting answers back quickly when it once took weeks. They don't have to spend all their time filling out things by hand.

I will predict, sir, that when we achieve full implementation of this upgrading of administrative support, we ought to able to come close to a 100 percent productivity increase in real safety surveillance by our inspector work force. We have already achieved almost 20 percent in the crudest implementation of this system where we've done it in these few places.

So, again, the point I wanted to make is that just having more people out there isn't always the solution. We can achieve a big increase in safety with relatively small cost compared to personnel cost by just getting this technology in.

Mr. MINETA. We've had a number of figures presented to us on the number of commuter certificated operators, and they range anywhere from 260 to 321. Now, on page four, you have indicated 280 passenger-carrying commuters certificated under the new part 135.

Is that today's figure?

Mr. BOND. I guess the difference in numbers comes from the uncertainty of the definition of what is. That 135 is the standard that applies to both the air taxi operators and commuters, and where you draw the line is never very clear to us.

The CAB has one definition. The Safety Board has another. We have a third here. That's the difference.

Mr. FOSTER. I think, also, even in the commuters you have the expression there, "passenger carrier." We have some commuters who obviously are just cargo. As of this morning I think our figure would be that we have 299 commuters certificated.

Mr. MINETA. Both cargo as well as passenger carriers.

Mr. FOSTER. Yes, sir. We also have some over 3,500 people that have been recertificated under the part 135. That includes air taxis and commuters.

Mr. MINETA. Now, in the Safety Board testimony it was pointed out that both in the Prinair accident and the Antilles air boat accident, there had been a number of violations recorded against both of these commuter operations prior to the accidents which the Board investigated.

In both cases no action was taken by the FAA until after the Safety Board action and investigations; in the case of the Antilles accident, September 1978; Prinair in July 1979.

Though one of the accidents occurred prior to your announcement, the second was months later; and yet there was no great effort to take enforcement action.

Why did the FAA not move on the commuter operator sooner than that?

Mr. BOND. Because we didn't do our job well enough, and we're going to cure that.

Mr. MINETA. With the new 135's, have you had any requests for exemptions or deferments from the new regulations?

Mr. BOND. We had a number in July. The date for compliance was July, but we weren't able to process all the requests. They all came in in a rush, so we let some of them have until December 1. After that, they're all under, or they're out.

Mr. MINETA. I thought the new 135's had been noticed in December of 1978 to be, in effect, on the first of December of 1979? What is the July date that you just referred to?

Mr. FOSTER. We had some interim dates. One was in July, and one was in August. The final date to be in operation was December 1. We had dates for people to indicate their intention to file——

Mr. MINETA. The interim dates were for what?

Mr. FOSTER. To report to the FAA as to what they intended to do, as to whether or not they were going to continue in the program. I think August was the last date, and final date to become effective was December 1.

Mr. MINETA. And as far as, again, exemptions, deferments, have you had a large number?

Mr. FOSTER. I wouldn't indicate it by a large number, but we have had requests for exemptions, particularly relating to requirements as far as installing equipment in the aircraft such as a third attitude gyro and things of this nature, requested because of the time element involved in procuring equipment and getting it installed.

Mr. MINETA. Turning from the 135 to the certification of airports, earlier we had testimony on the Prinair crash at St. Croix where the aircraft crashed directly in front of the airport fire station.

The Safety Board noted that there were numerous crash fire rescue problems associated with the survival aspects of this accident. As I recall, the air crash people who responded to that specific crash just sort of stood around while an employee of another airline came over with a hand extinguisher and had to put out the fire.

Now, have you given this area any attention as far as the certification of airports, since this appears to be a problem with many of these airports where commuter airlines are operating; and even in the case of St. Thomas where we had a 727 by American Airlines go in, and the crash and rescue operations were really very, very poor.

Mr. BOND. Well, the airports that you've cited there are served by part 121 operators and they have crash, fire, rescue capability; the equipment must meet our FAA standards. We supply money in part for buying the equipment, and the training has got to meet our standards. If when the whistle really blows in reality and they aren't out there quick enough, then somebody is not operating the way they ought to.

I was not aware—I don't think Chuck was either—of these fire situations at St. Croix. I have not heard of that, and we can give you a better answer, perhaps, later. The question, though, on the smaller airports which are served only by commuters, this is another problem. It's a tough question. It's the same difficult question that we have with security surveillance. The number of people and the number of planes in the smaller communities is very small; and to provide the kind of crash fire coverage that would be equal to what a larger airport would have would be a staggering expense. Even meeting today's standards, which are only at the relatively larger airports, is probably now in many cases the largest single expense that the airport itself has. That's going to be tough.

The argument, of course, is that not many people are exposed, not many flights come in, and that the cost-benefit ratio is awful.

Mr. MINETA. How do you measure that one life?

Mr. BOND. Well, I don't know. Statistically, it's a $800,000 value, I guess. Something like that. That's how the cost benefit calculations are made. But I don't know that that's adequate.

Mr. MINETA. The final area that I wanted to touch on was that of communication. Many of the commuter operators themselves spoke of some of the communications problems between the FAA and themselves. There was one citation of an AD—Airworthiness Directive—that had been issued on February 9, and yet this one operator had not received the AD on February 26. The only reason he know about it was because the Beechcraft Corp. had sent out a safety communique that they had to perform certain inspections on the wind spar; and he got a phone call on the 8th.

So, here's a situation of something that was immediate, yet it was dropped in the mail, and the operator didn't get the word.

Mr. FOSTER. Mr. Chairman, I don't know that particular case or the circumstances surrounding it, but the process we use—and we have, I think, a phenomenal communication capability—in disseminating information depends upon the urgency. We can be on the phone in a matter of minutes with all the parties that need to be notified. We have telegraphic AD's we send out. We send out some by registered mail. We have the process and time response related to the urgency of it. And how in the particular case you referred to someone could get an AD through a mixup in the system, whether the system worked and the person was not there on the other end to receive the information, those are the kinds of things that we would have to look at. The system is sound.

Mr. MINETA. In this instance, I think it was the grounding of all Beech 99's pending the inspection of that washer on the wing spar fitting. So, the question is, on those kinds of situations, how do you disseminate that information out?

Mr. FOSTER. The word goes out by telegram to all the owners that we have an emergency type of an AD. We also notify our people in the field who are the maintenance inspectors associated with that equipment so that they also have an opportunity to make sure that the operator or the owner of the equipment gets the information.

Mr. MINETA. Mr. Foster, are you satisfied with the level of training for the FAA inspection force given the new 135's?

Mr. FOSTER. Yes; I think we have a good training program.

Mr. MINETA. Across all FAA regions?

Mr. FOSTER. The inspector training program which we run out of Oklahoma City, I think, is good. As far as the level of skills and expertise that our people may have is a different story.

We have several programs under way to enhance that, but as far as the basic inspector training program, I think the people that go through our program and go into the field are certainly adequately trained.

Mr. MINETA. Thank you.

Mr. Clinger?

Mr. CLINGER. Thank you, Mr. Chairman. Just a couple of followups for my own information.

Mr. Bond, I wonder if you could explain to me again a couple of portions of the new legislation. You speak about increasing the civil penalty to $25,000; and you're asking for criminal penalties of $25,000, or prison sentences; did I understand that correctly? Are these directed to the same sort of offenses?

Mr. ONSTAD. No, sir. There are four different kinds of offenses.

A civil penalty might be in a situation where you had an improper manufacturing technique, such as the penalty levied on McDonnell Douglas for the improper quality control of pylons at Huntington Beach. By contrast, take a case in which you have somebody who deliberately goes out and makes bogus parts, or parts which are not manufactured to FAA specification and then sells them to the airlines, representing to the airlines that those parts were made in a form which is acceptable to the FAA. That, we believe, is a criminal kind of matter because once those parts get out in those aircraft, and they may not be to our specifications, you don't know whether they're going to fail or not, and you've got a lot of human lives riding on that kind of situation.

Mr. CLINGER. Those are directed to the willful offenses——

Mr. ONSTAD. Exactly, sir.

Mr. CLINGER. Fraud, et cetera.

Mr. ONSTAD. Exactly, sir.

Mr. CLINGER. I think perhaps you addressed this point, but we had a lot of testimony this week which would indicate that there really is no correlation between offenders, or shoddy safety maintenance, and the economics of the particular commuter. In other words, even those that are operating on a poor economic basis may still be keeping up the standards on safety. Would you share that perception?

Mr. BOND. I certainly would. We feel that there are a lot of people who are rather shaky financially who still run very safe operations; and when the money begins to run out, they'll stop rather than continue to fly an airplane that is not safe.

It isn't, however, to say that we don't watch that. It's something that a good inspector and a good surveillance person picks up. If the load factors are down, if they're laying pilots off, if they're not paying their bills on time, a good person will keep an eye on that situation. It can happen.

This issue came up—in the context of the 121 operators—sometime ago for me before the Congress, and we looked back, and we could not find the correlation between an accident and financial solvency until we went all the way back to the late 1940's when the so-called nonsked problem came up, and there were the series of crashes at Newark, N.J., and so on. Those were clearly tied in to financial insolvency.

But since then, we weren't able to correlate the two very well.

Mr. CLINGER. That seems to be the consensus right on through——

Mr. BOND. Yes. Now, that's amongst the major trunks. The "cockroach corner" type of operation is another matter.

Mr. CLINGER. You say we should all know about that, and I don't. "What is the cockroach corner"?

Mr. BOND. Well, go to Miami and head west on the airport, and you will find on the other end of the airport one of the more fascinating aviation operations in the world. "Corrosion corner", "cockroach corner"; most of the carriers there operate to the Caribbean. It's a poor area of the world, and they carry an awful lot of freight and cargo out of there; and they are economically disparate. One-plane operation, or two-plane operation. I am always fascinated to see a DC–8 being maintained out of the back of a sedan. Trunk goes up, tools come out, working away on the jet. It's, you know, that kind of thing. Lots of old airplanes as they leave the fleet of the majors end up there or in Houston or in Lauderdale; those are the three with the most airplanes of this sort. They're bought cheaply. Their economic utility is over competitively for the majors, but they still can be flown safely if they're maintained adequately.

Surveillance of this large business is really tough for the FAA. The people go out of business. They appear the next day. We've had to apply economic tests in the past, ordinary common carrier, so on, before we can get to the question of the safety of it. It's been tough.

So we have on the street now a proposal for a complete safety revamping of cockroach corner type of operators. We have abolished all of the old traditional economic tests, whether it's common carriage, whether it's private carriage; and the rules are going to be much stricter and upgraded, and they will be based simply on the size of the airplane. If it's so big, it's got to be operated by a certain standard. That will really simplify our life for this kind of an operator.

We're especially worried about this, because we know that a lot of 707's, DC–8's, old 727's, in the next few years are going to end up down there in big numbers. We'd better be ready for it.

Mr. CLINGER. Thank you, Mr. Bond, gentlemen. I've enjoyed the testimony this morning. The only disquieting item I heard was a statement by Mr. Foster that he would increase the number of personnel but had increased the rulemaking output; and given the fact that so many of the people seem to object to the clutter of regulations they have, I wonder if you view that as something that should be held down rather than increased.

Mr. BOND. You're looking at a program that is an anomaly. In every Federal program that I know of, people demand less and fewer rules. But in the FAA, the public, congressional, everywhere, the pressure and demand for greater government intervention and regulation and higher standards of safety, is very high for us. The Roper Newsletter—it's a weekly Kiplinger kind of a thing—did a poll of its readers, and there was overwhelming rejection of additional Federal rulemaking everywhere. OSHA, you name it, you know very well the rules, except the readers voted 7 to 1 that the FAA ought to be tougher on rulemaking.

Mr. MINETA. Would the gentleman yield on that point?

Mr. CLINGER. I yield back.

Mr. MINETA. Of existing rules? I think that's one of the things we also heard, rather than new rules, what we need is tougher enforcement of what is existing.

Mr. BOND. Well, I think that both are true. But when we look at the area, the things that we're making rules on; upgraded part 135; the new rules for the cockroach corner operators; new standard of safety and reliability for jet engines, things like that; higher training for pilots; I can't find any of our rules with the exception of the security proposal which—well, we touched on it today—security, and the flight time-duty time regulations are of debatable cost benefit. But most of the other stuff, it seems to me, has pretty clear benefit.

Mr. MINETA. Mr. Roberts? Mr. Stangeland?

Mr. STANGELAND. Thank you, Mr. Chairman.

You are apparently filling that mandate of more rules, because I fly with a neighbor of mine who owns an airplane, a farmer; and he advised me just Saturday when I flew with him that he got notification of a new rule that when he flies a single-engine four-place plane, a new rule that required that he show me how to put my seatbelt on or to buckle my seatbelt, just like the commercial airlines now; and I think maybe that may be taking it a little bit too far.

Let me say go back to this intensified surveillance.

When do you expect to see the proof in the pudding and say for a certainty that we have reduced accidents? How long do you think it's going to take?

Mr. BOND. Right now.

Mr. STANGELAND. You can tell it now?

Mr. BOND. I hope this is indicative of a trend. Certainly if you overlay it with rulemaking, and so on, and surveillance, it does correlate. For the 4-month period just ended, we had 10 commuter accidents. The same period last year, we had 30.

Mr. STANGELAND. And difference in weather atmosphere? We had a much more severe winter last winter.

Mr. BOND. I don't think the accidents would correlate with weather. I don't believe so. I don't want to claim credit yet. There is a random quality to it, but it's down by more than two-thirds. I hope it continues.

Mr. STANGELAND. Yesterday the representative from New England said that many of the general aviation duties of the inspectors in New England have been turned over to the aviation industry so as to enable those inspectors to devote more time to commuter and air taxi operations.

Now, is someone from FAA monitoring the industry's general aviation activities? Is there adequate evidence that general aviation safety will not suffer? Are other FAA regions doing this as well?

Mr. BOND. Well, we're doing it across the board. It's a tradition that began some years ago, when I took my pilot's license check, I was checked out just for private pilot by an FAA inspector in the Richmond GADO.

Today that's all done by a designee. We do the checks for airline transport ratings, but the rest are delegated to designees. Obviously, it saves the Federal Goverment money. That is a legitimate end. The question is, What is the quality control of the system? I think the philosophy of delegating this to some other person is probably sound, because I am not convinced that the simple fact that someone is on a payroll of the Federal Government as opposed to the payroll of somebody else means that they're going to be more conscientious. Both people should be.

So, what it comes down to is how well do you survey the system and make sure the people are doing right. If there's any flaw in it, it comes to that, I think.

I hear checkered reports of that, as I have heard of Federal employees doing their job. Some people are really tough, determined, examiners, for example; and some have a reputation for being more lenient.

The real issue is, are they better or worse than having the Federal people doing it; and I think on balance the system works all right.

Mr. STANGELAND. Very well. It would be my hope that as we move, and we're going to be moving into more commuters, although I notice the growth of the commuter industry has been fairly constant and fairly steady, but I was just visiting in the side room there with a gentleman who is thinking about putting together a group up in Baudet when we get that new runway up there, you know, that we got the money for this last session, that they'll have a commuter. And Baudet is way up north and they can use a commuter up there. We're going to see more commuters and I hope that you have the inspectors to assure the public of a safe, commuter system on one hand, but on the other hand, not be so stringent in policing that you hamper or harass the growth of that industry. We want it to be safe, but we want it to be able to function without Government harassment.

Mr. BOND. Well, we're going to whip this safety problem. The regulatory tools that you all have examined here today and in the past are going to do the job; and they're going to do it quickly. The biggest problem we have is money for navaids, airport develop-

ment, and so on. That is going to be the biggest difficulty in providing service.

Mr. STANGELAND. Thank you, Mr. Bond.

Thank you, Mr. Chairman.

Mr. MINETA. Mr. Bond, on page 7 of your testimony, you raise a question of security requirements for commuters.

Has there been a hijacking problem in the commuter industry?

Mr. BOND. Not so you would notice.

Mr. MINETA. Well, are we trying to solve a problem that doesn't exist?

Mr. BOND. Well, that is the comment that has flowed in in copius quantities to our docket as we have proposed these rules. The rule, however, flows from the congressional order which was put on the Deregulation Act that we should provide safety and protection that is similar to that provided by the heavy air carriers. And in addition to which it is a fact that any mean-minded hijacker can do a number on a commuter carrier, just as they can on a larger carrier. But whether or not they do so is another matter, and they have not for the most part done so. Whatever enters into the mind of a hijacker, nobody seems to want to climb on a Cessna 421 and demand to be taken to Paris, I guess. They would feel better off with American Airlines. We would have to sort this out. I don't think that our original cost estimates on this rule were right. The threat analysis may not be right, also.

Mr. STANGELAND. Would the gentleman yield for a minute?

Mr. MINETA. Surely.

Mr. STANGELAND. Maybe the hijacker looked at that safety record and decided he'd rather fly a trunk carrier.

Mr. BOND. Well, I hope that the hijackers are interested in the safety aspects of the nefarious conduct. We're always worried that crazy thing is going to done and the plane will be crashed. I hope they do pick the safest operator. If that's so, it's an encouraging thing to us.

Mr. MINETA. There was an Executive order that was issued back in 1978 requiring cost benefits of major regulatory actions to be analyzed and prepared Is your proposed regulation on commuter security subject to that Executive order, and are you balancing the cost of this regulatory action against the benefits that can be gained from it?

Mr. BOND. It is subject to that, and we have done a cost analysis of it, and it has been one of the most controversial aspects of the rule. I think we've underestimated the costs. We're updating it.

Mr. MINETA. We've had testimony in the past several days regarding accident investigations, such as the Antilles air boat accident, and the Prinair accident. In those two instances especially I think we saw a long practice of keeping inaccurate records. In one case it was a flight log, and the other, weight and balance records.

What does it take in the way of inspector effort to get behind those inaccurate records? I mean, they're just falsified. And maybe it's an impossible task, but is it possible for the inspectors instead of just reviewing the records to somehow go behind the paper on which those logs and manifests are recorded and look into actual practice?

Mr. FOSTER. Absolutely.

Mr. MINETA. How do we do that?

Mr. FOSTER. I think part of it is the attitude of the inspector, the supervision of the inspector, and the policy that comes down to be implemented. It is being done in many places.

Mr. BOND. I'll give you one concrete example, if I may, Mr. Chairman. We had an incident in Alaska where our people actually went back and checked the dates on which an individual was supposed to have flown and found out that he was in Seattle when he was supposed to have been in Anchorage. As a result, that gentleman is not flying today.

Mr. MINETA. I want to thank you, Mr. Bond, Mr. Onstad, and Mr. Foster.

I do want to thank you very much for your being here.

The subcommittee has now completed 4 days of hearings on commuter air safety, and I believe we can draw several conclusions.

The first and most important is that we have seen no evidence that there is any inherent or insurmountable obstacle which should prevent commuter aviation from carrying out its expanded roll under the Deregulation Act in a safe manner. The commuter industry does face challenges going into its expanded role, and improving industrywide safety is definitely one of those challenges. The 1979 commuter industry average is not good enough to fully protect the public and to provide the full measure in public confidence necessary to fuel this industry's growth. But we have seen no evidence that the safety record cannot be improved, and in fact we have seen evidence to the contrary.

The safety record showed marked improvement in the latter part of 1979. And we've seen specific cases of commuter operations which have performed well above the industry average and therefore show that marked improvement is indeed possible.

We can also conclude that in order to achieve that improvement, there is going to have to be a sustained commitment to that goal by the commuter operators, by the FAA, and by the Congress.

Regarding the commuter operators, we've had a lot of testimony about bad apples on the one hand, and the moral fiber of management on the other hand. But the key point is that nothing is more important than a commitment to safety by management. Most operators have made this commitment and they have welcomed effective FAA safety regulations and the new part 135. I believe this attitude reflects an understanding by these operators that nothing so endangers their future as continued operations by the occasional corner-cutter or trimmer in the industry.

From the FAA we need a recognition that the commuter industry, long a rapid growth industry, is now in an even greater transition period, and that Federal safety regulation programs are going to have to adapt to those new realities with a speed that is rare in Government. We've seen some promising beginnings in this area in the last year, but we cannot slack off at this point. We need increased staffing resources committed to this sector, and I think we needed them sooner than we're getting them. The new part 135 definitely holds promise, and we hope the FAA will sustain the commitment necessary to deliver on that promise. The issue of greater standardization of regional interpretations needs to be ad-

dressed, and we need greater effort on behalf of regions which have some special problems, such as Alaska and the Caribbean.

We in the Congress have a full agenda as well. This committee will soon begin its deliberations on the Airport and Airway Development Act. We will be looking further at the needs of commuter airports in ADAP and at navigational aids and landing aids in the F. & E. portion. And we on this subcommittee will continue to be involved in commuter safety performance and we will follow up on specific problem areas from time to time.

Again, I want to thank all of those who have participated in the 4 days of these hearings for their candidness, for their expertness, and they've helped this subcommittee in gaining a greater degree of knowledge about this subject matter. We hope that this will lead to making this a safer industry.

This subcommittee now stands adjourned.

[Whereupon, at 12:25 o'clock p.m., the subcommittee was adjourned.]

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